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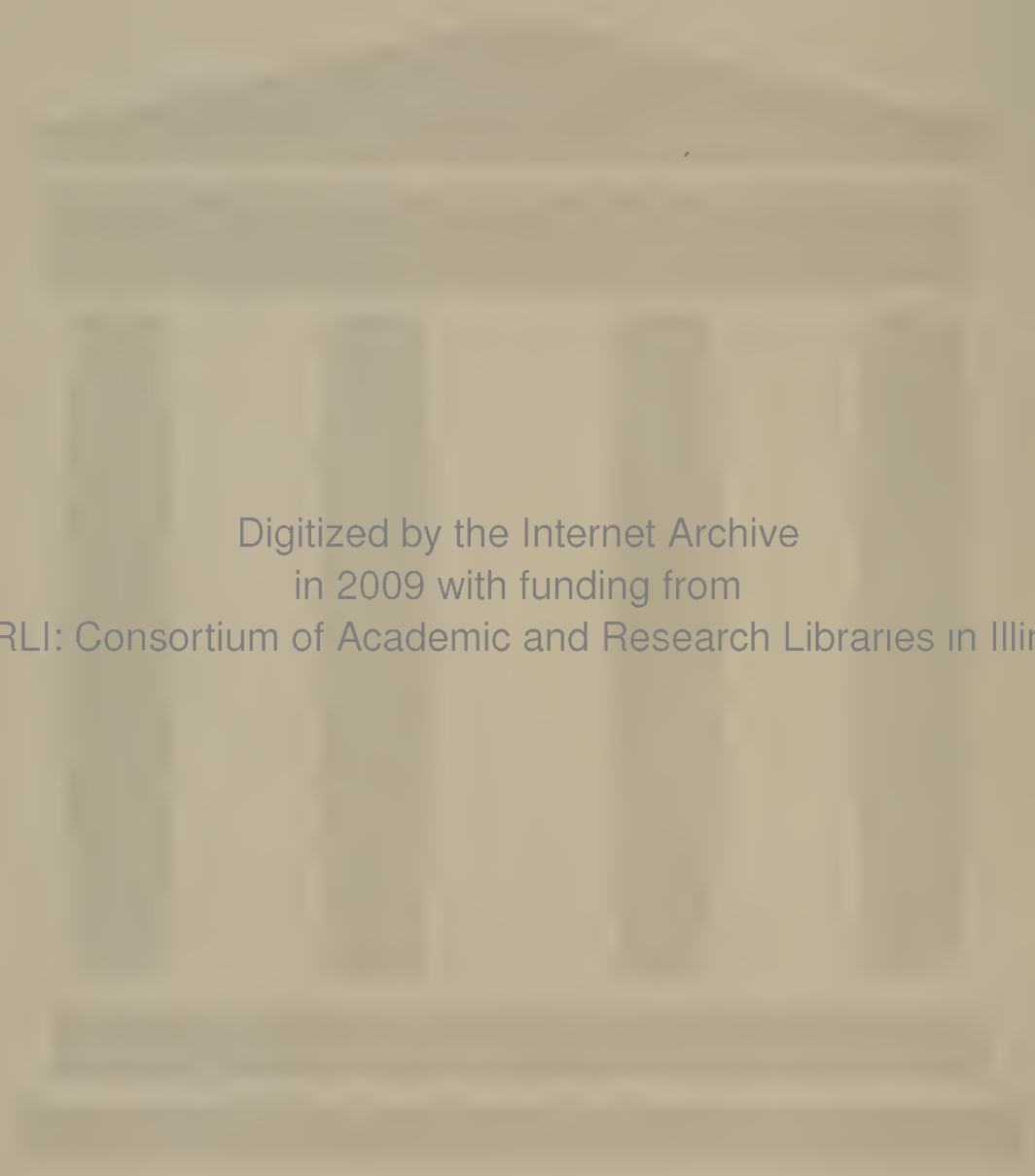
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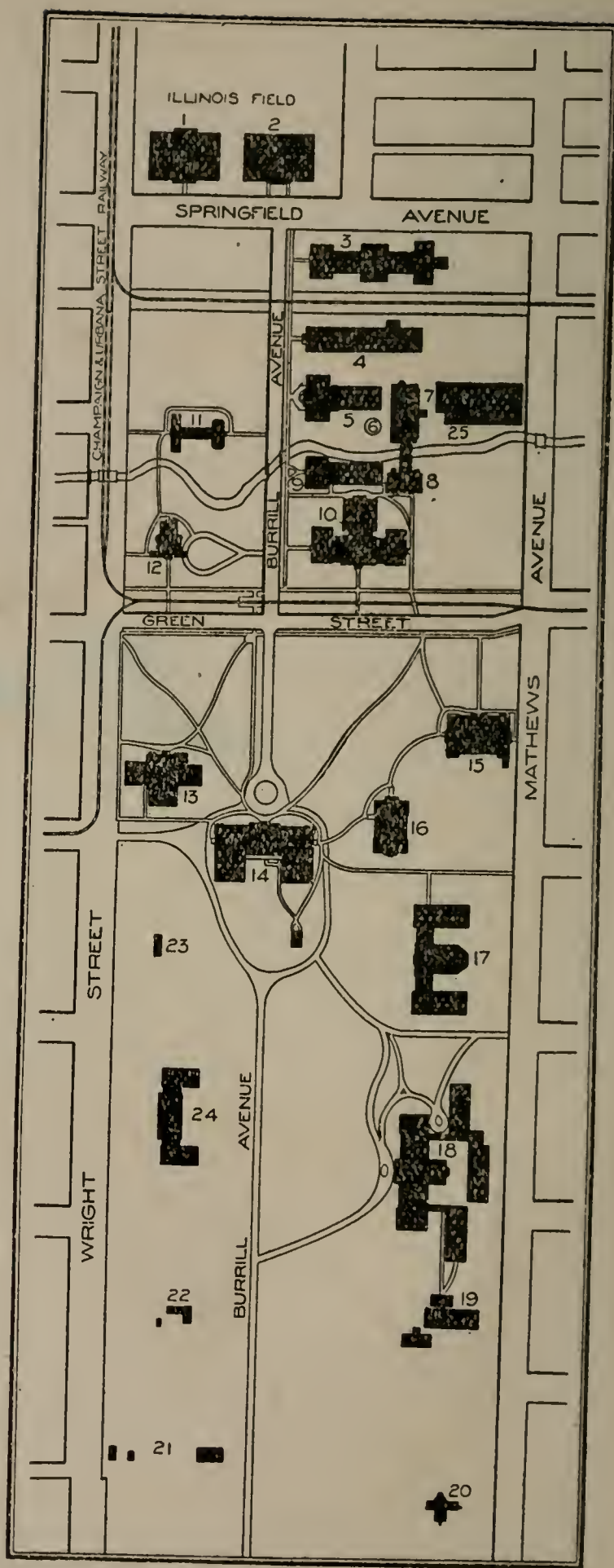
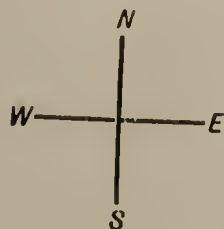
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- Men's Gymnasium
- 2 Armory
 - 3 Wood Shop and Foundry
 - 4 Metal Shops
 - 5 Electrical and Mechanical Laboratory
 - 6 Reservoir
 - 7 Heating Plant
 - 8 Pumping Plant
 - 9 Laboratory of Applied Mechanics
 - 10 Engineering Hall
 - 11 Greenhouse
 - 12 President's House
 - 13 Library
 - 14 University Hall
 - 15 Natural History Hall
 - 16 College of Law
 - 17 Chemical Laboratory
 - 18 Agricultural Buildings
 - 19 Greenhouse
 - 20 Observatory
 - 21 Warehouse
 - 22 Veterinary Building
 - 23 Insectary
 - 24 Woman's Building
 - 25 Mechanical Engineering Laboratory



UNIVERSITY GROUNDS AND BUILDINGS

Learning and Labor

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University of Illinois

ANNOUNCEMENTS

1905-1906

Register for 1904-1905

URBANA, ILLINOIS
PUBLISHED BY THE UNIVERSITY
APRIL 1, 1905 *

ESTABLISHED
1874
CHICAGO

HACK & ANDERSON  PRINTERS, CHICAGO

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THE UNIVERSITY CALENDAR

1905-1906

FOR ALL DEPARTMENTS AT URBANA

1905

FIRST SEMESTER

Sept. 13, Wednesday.	Entrance Examinations begin.
Sept. 18, 19, Monday. and Tuesday.	Registration days.
Sept. 20, Wednesday.	Instruction begins.
Nov. 6, Monday.	Latest day for announcing Theses Subjects
Nov. 30, Thursday.	Thanksgiving Day.
Dec. 22, Friday.	Holiday Recess begins.
1906.	
Jan. 9, Tuesday.	Instruction resumed.
Feb. 2, Friday.	First Semester ends.

SECOND SEMESTER

Feb. 5, Monday.	Instruction begins.
May 18, Friday evening.	Interscholastic Oratorical Contest.
May 17, 18, 19, Thurs- day to Saturday.	Public School Art Exhibit.
May 19, Saturday.	Interscholastic Athletic Meet.
May 29, Tuesday.	{ Hazelton Prize Drill. Company Competitive Drill.
June 1, Friday.	Military Day.
June 1, Friday.	Latest day for Acceptance of Theses.
June 10, Sunday.	Baccalaureate Address.
June 11, Monday.	Class Day.
June 12, Tuesday.	Alumni Day.
June 13, Wednesday.	Thirty-fifth Annual Commencement.

FIRST SEMESTER, 1906-1907

Sept. 12, Wednesday.	Entrance Examinations begin.
Sept. 17, 18, Monday and Tuesday.	Registration Days.
Sept. 19, Wednesday.	Instruction begins.
Nov. 5, Monday.	Latest day for Announcing Theses Sub- jects.
Nov. 29, Thursday.	Thanksgiving Day.
Dec. 21, Friday.	Holiday Recess begins.
1907.	
Jan. 8, Monday.	Instruction begins.
Jan. 25, Friday.	First Semester ends.

FOR PROFESSIONAL DEPARTMENTS IN CHICAGO.

1905.	
Sept. 26, Tuesday.	Winter Term begins at College of Medi- cine.
Oct. 5, Thursday.	Term begins at School of Dentistry.
Sept. 26, Tuesday.	Term begins at School of Pharmacy.
1906.	
April 26, Thursday.	Commencement of School of Pharmacy.
May 5, Saturday.	Commencement of School of Dentistry.
June 5, Tuesday.	Commencement of College of Medicine.

1905							1906																							
SEPTEMBER							JANUARY							MAY							SEPTEMBER									
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE
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OCTOBER							FEBRUARY							JUNE							OCTOBER									
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NOVEMBER							MARCH							JULY							NOVEMBER									
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE
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DECEMBER							APRIL							AUGUST							DECEMBER									
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE
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DEPARTMENTS OF THE UNIVERSITY

The University comprises the following colleges and schools, part of them located at Urbana and part of them in Chicago. Those at Urbana are:

The College of Literature and Arts.

The College of Engineering.

The College of Science.

The College of Agriculture.

The College of Law.

The School of Library Science.

The School of Music.

In connection with the College of Agriculture the Agricultural Experiment Station for Illinois is maintained at Urbana, partly by State and partly by Federal appropriations.

The Engineering Experiment Station, established by the State Legislature in 1903, is at Urbana, in connection with the College of Engineering.

The offices of the State Laboratory of Natural History are at the University in Urbana, as are also the offices of the State Entomologist.

The departments of the University in Chicago are:

The College of Medicine.

The School of Pharmacy.

The School of Dentistry.

The University Campus is within the corporate limits of Urbana, the west edge of the Campus being the dividing line between Urbana and Champaign. The post office, express, and telegraph, services of both cities are, therefore, equally available for the University. The two cities are connected by an electric street railway, which runs through the University grounds, with ten-minute service. The population of Champaign and Urbana is about 17,000.

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719 West Hill Street, C.

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Library Economy. Reference Librarian.
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Voice Culture. *1012 West California Avenue, U.*
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912 West California Avenue, U.
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100 State Street.
- FRED DRURY HOLLENBECK, M.D., Instructor in Obstetrics.
183 Rush Street.
- LOUIS LAWRENCE LOWENTHAL, M.D., M.R.C.S. (Eng.),
Instructor in Obstetrics. *3058 Calumet Avenue.*
- HELIODOR SCHILLER, M.D., Instructor in Obstetrics.
98 State Street.

SCHOOL OF DENTISTRY

FACULTY

- BERNARD JOHN CIGRAND, B.S., M.S., D.D.S., DEAN, Pro-
fessor of Prosthetic Dentistry, Technic and History.
Corner North Avenue and Robey Street.
- GEORGE WASHINGTON COOK, B.S., D.D.S., Professor of
Bacteriology, Pathology and Materia Medica and Therapeutics.
Corner 47th Street and Kenwood Avenue.
- DONALD M. GALLIE, D.D.S., Professor of Operative Dentistry
and Operative Technic. *100 State Street.*

GEORGE WALTER DITTMAR, D.D.S., Associate Professor of
Operative Dentistry, Technic and Superintendent of Infirmary.
College.

CHARLES ERWIN JONES, B.S., D.D.S., Secretary. Associate
Professor of Prosthetic Dentistry, Associate Oral Surgeon.
College.

THOMAS L. GRISMORE, PH.G., D.D.S., Associate Professor of
Materia Medica and Therapeutics. *1035 West Van Buren Street.*

JAMES NELSON MACDOWELL, D.D.S., Professor of Ortho-
dontia. *Venetian Building.*

GEORGE THOMAS CARPENTER, M.D., D.D.S., Professor of
Oral Surgery. *Trude Building.*

FRANK EWING ROACH, D.D.S., Professor of Porcelain Work.
Trude Building.

T. ELHANAN POWELL, D.D.S., Professor of Comparative
Anatomy. *Stewart Building.*

OSCAR A. KING, M.D., Professor of Neurology. *70 State Street.*

DANIEL ATKINSON K. STEELE, M.D., Actuary, Consulting
Surgeon. *Columbus Memorial Building.*

WILLIAM THOMAS ECKLEY, M.D., Professor of General and
Regional Anatomy. *979 Jackson Boulevard.*

JACOB F. BURKHOLDER, M.D., Professor of Physiology.
Reliance Building.

FRED. CARL ZAPFFE, M.D., Professor of Histology and Micro-
scopy. *1764 Lexington Street.*

ELMER DEWITT BROTHERS, B.S., LL.B., Professor of Dental
Jurisprudence. *New York Life Building.*

JOSEPH MCINTYRE PATTON, M.D., Professor of Physical
Diagnosis and General Anesthetics. *237 South Hoyne Avenue.*

CHARLES ABBOTT, M.D., Professor of Chemistry.
813 West Harrison Street.

JOHN R. MURPHY, D.D.S., Adjunct Professor of Operative
Technic. *Ashland and Van Buren Street.*

ASHLEY HEWITT, D.D.S., Professor of Electricity.
824 West Madison Street.

CORINNE B. ECKLEY, Associate Professor of General and Re-
gional Anatomy. *979 Jackson Boulevard.*

SPECIAL LECTURERS AND CLINICIANS

WILLIAM M. HARSHA, M.D., Oral Surgery and General Anesthetics. *Columbus Memorial Building.*

SETH E. MEEK, M.S., PH.D., Comparative Physiology. *Field Columbian Museum, Chicago.*

ZAN D. KLOPPER, Instructor in Dental and Facial Art.

CHIEF DEMONSTRATORS

GEORGE WALTER DITTMAR, D.D.S., Operative Dentistry.

CHARLES ERWIN JONES, B.S., D.D.S., Prosthetic Dentistry.

CORINNE BUFORD ECKLEY, General and Regional Anatomy.

JOHN O. SMITH, Applied Electricity.

SCHOOL OF PHARMACY

[Michigan Boulevard and Twelfth Street.]

FACULTY

EDMUND JANES JAMES, PH.D., LL.D., PRESIDENT. *Urbana.*

FREDERICK MARION GOODMAN, PH.G., DEAN OF THE FACULTY. Professor of Materia Medica and Botany.

School.

CARL SVANTE NICANOR HALLBERG, PH.G., Professor of Theoretical and Practical Pharmacy. *358 Dearborn Street.*

WILLIAM AUGUST PUCKNER, PH.G., Professor of Chemistry. *75 Wells Street.*

WILLIAM BAKER DAY, PH.G., SECRETARY OF THE FACULTY, Professor of Histological Botany. *School.*

HENRY HORACE ROGERS, PH.B., M.D., Lecturer in Physiology. *Highland Park.*

EDMUND NORRIS GATHERCOAL, PH.G., Instructor in Pharmacognosy. *Wilmette.*

WALTER SCHMITT, PH.G., Instructor in Chemistry. *School.*

CLYDE MASON SNOW, PH.G., Instructor in Pharmacy. *School.*

ACADEMY

INSTRUCTORS

FRANK HAMSHER, A.B., PRINCIPAL. *924 West Illinois Street, U.*

MARGARET ANNIE SCOTT, Instructor in French and German.

913 West California Avenue, U.

JOHN THOMAS JOHNSON, Instructor in Science.

928 West Green Street, U.

JOSEPH HINCKLEY GORDON, A.M., Instructor in History and
Geometry.

412 East Daniel Street, C.

CHARLES WILLIAM WHITTEN, Instructor in Physics and
Geometry.

311 West Illinois Street, U.

WILLIAM GAY PALMER, A.M., Instructor in Greek and Latin.

406 East John Street, C.

FLORENCE MARY SMITH, A.B., Instructor in English.

606 West Green Street, U.

HARRY WILFRED REDDICK, A.B., Instructor in Mathematics.

905 West Green Street, U.

CHARLES MAXWELL McCONN, A.M., Instructor in English.

917 West Green Street, U.

STATE LABORATORY OF NATURAL
HISTORY

LABORATORY STAFF

PROFESSOR STEPHEN ALFRED FORBES, PH.D., DIRECTOR.

1209 West Springfield Avenue, U.

CHARLES ARTHUR HART, Systematic Entomologist.

923 West Green Street, U.

MARY JANE SNYDER, Secretary.

504 East Daniel Street, C.

ROBERT EARL RICHARDSON, A.M., Assistant on Biological
Survey.

603 East Daniel Street, C.

ESTES PARK TAYLOR, B.S., Field Entomologist.

1006½ West Green Street U.

EDWARD OWEN GUERRANT KELLY, M.S., Entomological
Assistant.

1006½ West Green Street, U.

EARL QUINTER SNIDER, Accountant.

1002 West Oregon Street, U.

FREDERICK KNAB, Custodian and Artist.

1006½ West Green Street U.

MARIE L WALDO, B.S., Librarian.

1002 California Avenue, U.

AGRICULTURAL EXPERIMENT STATION

STATION STAFF

PROFESSOR EUGENE DAVENPORT, M.AGR., DIRECTOR.

Experiment Station Farm, U.

PROFESSOR THOMAS JONATHAN BURRILL, PH.D., Botanist.

1007 West Green Street, U.

PROFESSOR CYRIL GEORGE HOPKINS, PH.D., Vice-Director,
Chief in Agronomy and in charge of Chemical Laboratory.

1001 South Wright Street, C.

PROFESSOR STEPHEN ALFRED FORBES, PH.D., Consulting Entomologist.

1209 West Springfield Avenue, U.

PROFESSOR DONALD MCINTOSH, V.S., Consulting Veterinarian.

511 West Park Street, C.

PROFESSOR HERBERT WINDSOR MUMFORD, B.S., Chief in
Animal Husbandry.

608 South Mathews Avenue, U.

PROFESSOR JOSEPH CULLEN BLAIR, Chief in Horticulture.

810 West Oregon Street, U.

PROFESSOR WILBER JOHN FRASER, M.S., Chief in Dairy Husbandry.

1003 South Wright Street, C.

ASSISTANT PROFESSOR CHARLES FREDERICK HOTTES, PH.D.,
Assistant in Botany.

915 West California Avenue, U.

ASSISTANT PROFESSOR JOHN WILLIAM LLOYD, M.S.A., Assistant
Chief in Olericulture.

1005 South Wright Street, C.

ASSISTANT PROFESSOR CHARLES SPENCER CRANDALL, M.S.,
Assistant Chief in Pomology.

805 Goodwin Avenue, U.

LOUIE HENRIE SMITH, M.S., Chief Assistant in Chemistry and
Plant Breeding. (*On leave.*)

ASSISTANT PROFESSOR JEREMIAH GEORGE MOSIER, B.S.,
Assistant Chief in Soil Physics.

907 West Illinois Street, U.

- EDWARD MURRAY EAST, B.S., First Assistant in Plant Breeding.
1005 West Oregon Street, U.
- JAMES HARVEY PETTIT, PH.B., First Assistant in Soil Analysis.
914½ West California Avenue, U.
- CATHERINE McCALLUM McINTYRE, Secretary.
310 East Green Street, C.
- WILLIAM FRANKLIN PATE, B.S., Assistant in Chemistry.
901 West Illinois Street, U.
- JOSEPH WILLIAM HART, Assistant Chief in Dairy Manufactures.
912 West California Avenue, U.
- WILLIAM DIETRICH, B.S.A., First Assistant in Swine Husbandry.
701 West California Avenue, U.
- RUFUS CHANCEY OBRECHT, B.S.A., First Assistant in Horse Investigation.
510 West High Street, U.
- CLIFFORD WILLIS, B.S., Assistant in Soil Physics.
503 High Street, U.
- CASSIUS CLAY HAYDEN, B.S.A., Assistant in Dairy Husbandry.
903 West California Avenue, U.
- HERBERT ANDREW HOPPER, B.S.A., Assistant in Dairy Husbandry.
903 West California Avenue, U.
- EDWIN STANTON GOOD. B.S., Assistant in Animal Husbandry.
1007 West Illinois Street, U.
- CARL EMIL LEE, B.S., Assistant in Dairy Husbandry.
Freeport, Illinois.
- JAMES THEOPHILUS BARRETT, B.S., Assistant in Botany.
1203 West Stoughton Street, U.
- ALBERT NASH HUME, M.S., First Assistant in Crop Production.
506 West High Street, U.
- LOUIS DIXON HALL, B.S., First Assistant in Animal Husbandry.
1012 South Sixth Street, C.
- HARRY HOUSER LOVE, B.S., Assistant in Chemistry.
1017 West Oregon Street, U.
- JEROME EDWARD READHIMER, B.S., Superintendent Soil Experiment Fields.
311 East Springfield Avenue, C.
- JOHN MAIN TRUMAN, B.S., First Assistant in Dairy Husbandry.
901 California Avenue, U.

UNIVERSITY OF ILLINOIS

HISTORY

The University of Illinois is situated in Champaign County, in the eastern central part of the state, between the cities of Urbana and Champaign, and within the corporate limits of the former. It is one hundred and twenty-eight miles south of Chicago, at the junction of the Illinois Central, the Cleveland, Cincinnati, Chicago and St. Louis, and the Wabash, railroads. The country around is a rich and prosperous agricultural region. The cities of Urbana and Champaign have, together, a population of about 17,000.

In 1862 the national government donated to each state in the Union public land scrip in quantity equal to 30,000 acres for each senator and representative in congress, "for the endowment, support, and maintenance of at least one college, whose leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts * * * in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life."

On account of this grant the state pays the University, semi-annually, interest at the rate of five per cent. on about \$610,000; and deferred payments on land contracts amount, approximately, to \$35,000.

To secure the location of the University several counties entered into competition by proposing to donate to its use specified sums of money, or their equivalent. Champaign County offered a large brick building in the suburbs of

Urbana, erected for a seminary and nearly completed, about 1,000 acres of land, and \$100,000 in county bonds. To this the Illinois Central Railroad added \$50,000 in freight.

The state has from time to time appropriated various sums for permanent improvements, as well as for maintenance. The present value of the entire property and assets is estimated at \$2,600,000.

The institution was incorporated February 28, 1867, under the name of the Illinois Industrial University, and placed under the control of a Board of Trustees, constituted of the Governor, the Superintendent of Public Instruction and the President of the State Board of Agriculture, as *ex-officio* members, and twenty-eight citizens appointed by the Governor. The chief executive officer was called Regent, and was made an *ex-officio* member of the Board and presiding officer both of the Board of Trustees and of the Faculty.

In 1873 the Board of Trustees was reorganized, the number of appointed members being reduced to nine and of *ex-officio* members to two—the Governor and the President of the State Board of Agriculture. In 1887 a law was passed making membership elective, at a general state election, and restoring the Superintendent of Public Instruction as an *ex-officio* member. There are, therefore, now three *ex-officio* and nine elective members. Since 1873 the President of the Board has been chosen by the members from among their own number for a term of one year.

The University was opened to students March 2, 1868. The number of students enrolled at this time was about fifty, and the Faculty consisted of the Regent and three professors. During the first term another instructor was added, and the number of students increased to 77—all young men.

During the first term instruction was given in algebra, geometry, physics, history, rhetoric, and Latin. Work on the farm and gardens, or about the buildings, was at first compulsory for all students. In March of the next year,

however, compulsory labor was discontinued, save when it was made to serve as a part of class instruction. A chemical laboratory was fitted up during the autumn of 1868. Botanical laboratory work began the following year. In January, 1870, a mechanical shop was fitted up with tools and machinery, and here was begun the *first shop instruction* given in any American university. During the summer of 1871 the Wood Shops and Testing Laboratory, burned June 9, 1900, was erected and equipped for students' shop work in both wood and iron.

By vote, March 9, 1870, the Trustees admitted women as students. During the year 1870-71 twenty-four availed themselves of the privilege. Since that time they have constituted from one-sixth to one-fifth of the total number of students.

According to the original state law, the usual diplomas and degrees could not be granted by the University, but certificates showing the studies pursued and the attainments in each were given instead. The certificates proved unsatisfactory to the holders, and in 1877 the legislature gave the University authority to confer degrees and issue diplomas.

In 1885 the legislature changed the name of the institution to the "University of Illinois." It also passed a bill transferring the *State Laboratory of Natural History* from the Illinois State Normal University to the University of Illinois. This laboratory was created by law for the purpose of making a natural history survey of the state, the results of which should be published in a series of bulletins and reports, and for the allied purpose of furnishing specimens illustrative of the flora and fauna of the state to the public schools and to the state museum. For these purposes direct appropriations are made by the legislature from session to session. A large amount of material has been collected, and extended publications have been made in both the forms above mentioned.

By an act approved March 2, 1887, the national gov-

ernment appropriated \$15,000 per annum to each state for the purpose of establishing and maintaining, in connection with the colleges founded upon the congressional act of 1862, agricultural experiment stations, "to aid in acquiring and diffusing among the people of the United States useful and practical information on subjects connected with agriculture, and to promote scientific investigation and experiment respecting the principles and applications of agricultural science." Under this provision the *Agricultural Experiment Station* for Illinois was placed under the direction of the Trustees of the University, and a part of the University farm, with buildings, was assigned for its use. At least one bulletin of results is published every three months, and the copies are gratuitously distributed over the state. Editions of 28,000 copies are now issued.

In 1890 the Congress of the United States made further appropriations for the endowment of the institutions founded under the act of 1862. Under this enactment each such college or university received the first year \$15,000, the second \$16,000, and thereafter was to receive \$1,000 per annum additional to the amount of the preceding year, until the amount reached \$25,000, which sum was to be paid yearly thereafter.

May 1, 1896, the *Chicago College of Pharmacy*, founded in 1859, became the *School of Pharmacy of the University of Illinois*. Its building is located at Michigan Boulevard and Twelfth Street, Chicago.

At the meeting of the Board of Trustees of the University held December 8, 1896, upon recommendation of the President of the University, the Trustees voted to take steps for the organization of a law school. Appropriations were made for salaries, for the purchase of books, and for incidental expenses. Pursuant to this action of the Board of Trustees, the *School of Law* was organized, and opened September 13, 1897. The course of study covered two years, in conformity with the existing requirements for admission to the bar of Illinois. In the following Novem-

ber, however, the supreme court of the state announced rules relating to examinations for admission to the bar which made three years of study necessary, and the course of study in the Law School was immediately rearranged on that basis. On February 9, 1900, the name of the School of Law was changed, by vote of the Board of Trustees, to *College of Law*.

Negotiations looking to the affiliation of the College of Physicians and Surgeons, of Chicago, with the University, which had been going on for several years, were concluded by the Board of Trustees by action taken upon propositions submitted by the College of Physicians and Surgeons to the Board at its meeting of March 9, 1897. According to the agreement made, the College of Physicians and Surgeons became on April 21, 1897, the *College of Medicine of the University of Illinois*. The College is located at 813 West Harrison Street, Chicago.

At the meeting of the Board of Trustees held April 22, 1897, the matter of the appointment of a librarian was considered by the Board and referred to a committee. This action of the Board was taken with a view of bringing to the University the School of Library Economy, which had been established in 1893 at the Armour Institute of Technology, in Chicago, and of securing the Director of that school for librarian of the University library. These plans were carried out, and the *State Library School* was opened at the University in September, 1897.

Pursuant to action taken by the Board of Trustees March 12, 1901, a School of Dentistry was organized as a department of the College of Medicine. The School was opened October 3, 1901.

BUILDINGS AND GROUNDS

The land occupied by the University and its several departments embraces about 220 acres.

The Agricultural Building, erected at a cost of \$150,000, consists of four separate structures, built around an open court and connected by corridors. The main building is 248 feet long, from 50 to 100 feet in depth, and three stories high, and contains offices, class rooms, and laboratories for the departments of agronomy, animal husbandry, dairy husbandry, horticulture, and veterinary science; offices of the State Entomologist; the chemical laboratory of the Experiment Station; commodious administration rooms; an assembly room with a seating capacity of 500, and on each floor a fireproof vault for records. The other three buildings are each 45 by 116 feet and two stories high; one is for dairy manufactures, one for farm machinery, and one for veterinary science and stock judging. These buildings are of stone and brick, roofed with slate, and contain, all told, 113 rooms and a total floor space of nearly two acres. An adjacent glass structure serves the departments of agronomy and horticulture. There are, in addition to these buildings, a veterinary hall, three dwellings, three large barns, and a greenhouse.

The Armory, 100 by 150 feet in one grand hall, gives ample space for company drill and for large audiences upon special occasions.

The Astronomical Observatory is in the form of the letter T, the stem of which extends toward the south. The equatorial room, surmounted by the dome, is at the intersection of the stem and bar of the T. Besides the equatorial room the Observatory contains four transit rooms, a clock room, a recitation room, and a study.

The Central Heating Station is a brick building, 55 by 120 feet. It contains the apparatus used for heating the buildings on the campus. An annex contains the pump

room and the stock room. The pipes of the heating system and the wires for power and light are carried from the Central Heating Station to the several buildings through brick tunnels $6\frac{1}{2}$ feet high by 6 feet wide. The length of tunnel thus far constructed is 3,200 feet.

The Chemical Laboratory is a three-story building, the ground plan of which is shaped like the letter E. The extreme dimensions are 230 feet along the front and 116 feet along the wings. The middle rear wing contains the lecture amphitheater, which will seat 350. The end wings contain the large general laboratories. The central part of the building is occupied by offices, museum, class and seminary rooms, supply rooms, etc., and a number of special rooms for research work. There is a well-lighted basement, which contains the heating and ventilating plant, and rooms for assaying and metallurgy.

The Electrical Engineering Laboratory is a brick building two stories high, 100 feet by 50 feet, with a wing 90 feet by 50 feet. A basement under the main part contains a large storage battery, and supply rooms; the main floor is the laboratory proper, containing the electrical apparatus described elsewhere; the second floor has recitation and computing rooms, the two photometers, and an office. The wing contains the automatic telephone exchange of the University, and the light and power plant of 200 kilowatts capacity.

Engineering Hall has a frontage of 200 feet, a depth of 76 feet on the wings, and 138 feet in the center. The first story contains the laboratories of the department of physics, the drafting room, and one recitation room of the department of electrical engineering, the masonry laboratories, instrument rooms, and workshop of the department of civil engineering. The second story contains the lecture room and the preparation rooms of the department of physics, the recitation and drawing rooms, cabinets, and studies of the departments of civil and of municipal engineering, and the office of the department of electrical engineering. The

third story contains the elementary laboratory of the department of physics, the drawing rooms, lecture rooms, cabinets, and studies of the mechanical department, as well as the dean's offices, the faculty parlor, and library. The fourth story is devoted to the department of architecture, and contains drawing and lecture rooms, cabinets, a photograph studio, a blue-print laboratory, and the architectural library.

The Laboratory of Applied Mechanics is a brick building. The materials testing laboratory occupies the front, 45 by 65 feet; while the rear wing, 45 by 106 feet, contains the hydraulic laboratory.

The Library Building is 167 by 113 feet, with a tower 132 feet high. The main floor contains the reference room, the reading room, the conversation room, the cataloguing room, and the delivery room, which opens into the second story of the book-stack. The second floor contains the Library School study room, seminary rooms, the Bolter collection of insects, and the administrative offices of the University. The basement contains the Library School lecture room and other well-lighted rooms, which are at present used for various purposes. The book-stack is a rear wing to the building, separated from the rest of it by a fireproof wall. The stack will eventually contain five stories, and will accommodate 150,000 volumes. At present but three stories are fitted with shelving.

The Mechanical Engineering Laboratory is a brick building with a frontage of 80 feet and a total depth of 182 feet. The front section is two stories high, 30 by 80 feet, and contains offices, lecture and computation rooms, and a large instrument room. Back of this are two bays with saw-tooth roof construction, each 40 by 136 feet. The north bay is provided with a concrete testing floor and a 10-ton three-motor traveling crane of 38-feet span.

The Men's Gymnasium is a new three-story building of stone and pressed brick, 100 by 150 feet. On the first floor there is a swimming pool, lined with white enamel bricks,

26 feet wide, 75 feet long, and 8 feet deep at the lower end. This floor contains, also, the general locker room, which is fitted up with all-metal lockers, and with shower, tub, and steam baths; rooms for the University athletic teams; a room for visiting teams; a special dressing room for members of the faculty; and offices for the physical director and athletic instructors. The entire second floor is one large room, which is fitted up with all the modern appliances for gymnastic exercises. The third floor contains an elevated running track, 15 laps to the mile, which is properly banked on the turns to secure the greatest speed and comfort in running.

The Metal Shops is a one-story brick building, 50 by 250 feet. It contains a lecture room, two office rooms, a machine shop, and a forge shop. The machine shop is 48 by 140 feet. Power is supplied by a 20 H. P. electric motor. A three-ton traveling crane of 12 foot span covers the center of the floor for the entire length.

Natural History Hall is 134 by 94 feet, with basement, two main stories, and an attic. It is occupied by the departments of botany, zoology, physiology, mineralogy, and geology, for each of which there are laboratories, lecture rooms, and offices, and contains the office and equipments of the State Laboratory of Natural History. There are six laboratory rooms on each of the main floors,—sufficient altogether to accommodate 200 students, besides offering abundant facilities for the private work of the instructors.

The Pumping Station of the University water-works is a brick building, 38 by 73 feet, connected with the Central Heating Plant. Two 8-inch wells, 145 feet deep, supply the University with wholesome water. A masonry reservoir provides for a fire-reserve supply. The pumps, tanks, and connections are arranged to give opportunities for experimental work and also to vary the working conditions in the adjacent hydraulic laboratory.

University Hall occupies three sides of a quadrangle,

measuring 214 feet in front and 122 feet upon the wings. It is devoted almost exclusively to class rooms.

The Woman's Building, which, it is expected, will be completed by the autumn of 1905, is to cost \$80,000. It is to be in pure New England colonial style of architecture, and will be built of reddish brown brick with white stone trimmings. The central part of the structure is the woman's gymnasium. On the lower floor there is a swimming tank, abundant room for lockers, dressing rooms and baths. The upper floor is devoted to the main gymnasium, which is 92 by 50 feet. The north wing of the building is given to the department of household science, and the south wing provides rooms for the social life of the women students.

The Wood Shop and Foundry occupies a brick building. The part of the building devoted to the wood shop contains a bench room, lathe room, machine room, and various smaller rooms for lectures, exhibition purposes, etc. The part devoted to the foundry has a large molding floor traversed by a 5-ton traveling crane, and a large basement room for storage of materials.

LABORATORIES *

SCIENCE LABORATORIES

The *botanical, geological, physiological, and zoological laboratories* are in Natural History Hall.

The *chemical laboratory* occupies the building of the same name, already described.

The *physical laboratory* is in Engineering Hall. It is provided with piers, a constant temperature room, and other conveniences for measurement work.

The *psychological laboratory*, in University Hall, is well provided with apparatus of many different kinds for use in experimental study, research, and instruction.

* For a more detailed account of these laboratories, see under the appropriate College.

ENGINEERING LABORATORIES

The *cement laboratory* of the department of civil engineering occupies rooms in the basement of Engineering Hall.

The *electrical engineering laboratory* and the *mechanical engineering laboratory* each occupies its own building, as already described under "Buildings and Grounds."

The *hydraulic laboratory* and the *materials testing laboratory* occupy the Laboratory of Applied Mechanics.

SPECIAL LABORATORIES FOR RESEARCH

The *chemical laboratory of the Agricultural Experiment Station* and the *physical and bacteriological laboratories* for the examination of soils are situated on the third floor of the Agricultural Building.

The laboratory rooms of the *State Laboratory of Natural History* are in Natural History Hall.

A *Biological Station*, equipped for field and experimental work in aquatic biology, is maintained on the Illinois River by the State Laboratory of Natural History. It has its separate staff, but is open to students of the University at all times, on application, and during the summer months to special students not connected with the University.

A *laboratory for sanitary water analysis* has been equipped with all necessary appliances, and chemical investigation of the water supplies of the state is carried on

A *laboratory of economic geology*, for the investigation of clays, lime and cement-making materials, building stones, road metal, and all other mineral substances of economic value, has been equipped with the necessary appliances for such investigations.

COLLECTIONS

AGRICULTURAL

The various agricultural departments maintain collections illustrative of their work, prominent among which are those showing typical specimens of standard varieties of corn, wax models of fruits and vegetables, an extensive horticultural herbarium, specimens of many breeds of live stock, a large collection of farm machinery, and exhibits of negatives and samples showing progress of certain investigations, as with fruit and with corn.

BOTANICAL

The *herbarium* contains about 50,000 mounted specimens of plants. The flora of North America is fairly well represented, the collection of species of flowering plants indigenous to Illinois is particularly complete, and a considerable collection of foreign species has been made. The collections of fungi amount to 32,000 named specimens and include a full set of those most injurious to other plants, causing rusts, smuts, moulds, etc. There are specimens of wood from 200 species of native trees and shrubs, which well illustrate the varieties of native wood.

ENGINEERING

The following departments of the College of Engineering have made extensive and valuable collections, which are placed in rooms in Engineering Hall.

ARCHITECTURE.—A large number of specimens of stone, bricks, terra cotta, sanitary fixtures, casts of moldings and of ornament have been accumulated, together with some excellent specimens of industrial arts, models of structures, working drawings of important buildings, 4,500 lantern slides, 20,000 plates and photographs, and an excellent working library, with large classified collections of plates from architectural journals, and 1,800 stereoscopic views of buildings, etc.

CIVIL ENGINEERING.—The civil engineering department has a large room containing samples of iron, steel, wood, brick, and stone; materials for roads and pavements; models of arches and trusses, one of the latter being full-sized details of an actual modern railroad bridge. The department also possesses a very large collection of photographs and blue-print working drawings of bridges, metal skeleton buildings, masonry structures, and standard railroad construction.

ELECTRICAL ENGINEERING.—This department has a collection of samples illustrating standard practice in the industrial applications of electricity. There is also a rapidly growing collection of lantern slides, photographs, blue-prints, drawings, pamphlets, and other engineering data.

MECHANICAL ENGINEERING.—This department has among other things a partial set of Reuleaux models, together with models of valve gears, sections of steam pumps, injectors, valves, skeleton steam and water gauges, standard packings, steam-pipe coverings, and drop forgings. There are also fine examples of castings, perforated metal, defective boiler plates, and sets of drills, with numerous samples of oil, iron, and steel. A large number of working drawings from leading firms and from the United States Navy Department forms a valuable addition to the above collections.

GEOLOGICAL

Lithology is represented by type collections of rocks (9,000 specimens), arranged to illustrate Rosenbusch; from Voigt and Hochgesang, L. Eger, and A. Kranz; a type collection from Ward; 1,000 thin sections of rocks and minerals; a large number of ornamental building stones; a stratigraphic collection to illustrate Illinois geology, and a collection of Illinois soils (104).

The *mineralogical* collection is especially rich in rock-forming minerals, ores, and materials of economic value. It contains over 12,000 specimens carefully selected to meet the wants of the students, and 575 crystal models.

The *paleontological* collection (49,000 specimens) contains representative fossils from the entire geologic series, but is especially rich in paleozonic forms. It embraces the private collections of A. H. Worthen (including 742 type specimens); Tyler McWhorter; Mr. Hertzner; 200 thin sections of corals; the Ward collection of casts, and a considerable number of special collections representing the fauna and flora of particular groups.

LIBRARY ECONOMY

A collection of books and pamphlets on library science, of library reports and catalogs, of mounted samples showing methods of administration in all departments, and of labor-saving devices and fittings has been made, and is arranged by the Dewey Decimal classification in the Library School seminary room.

PEDAGOGICAL

In the rooms of the department of education in University Hall is a considerable collection of illustrative material from the manual training departments of various schools; photographs of school buildings, drawings and constructive work by pupils in the public schools, and the nucleus of a representative collection of apparatus for the school laboratory.

ZOOLOGICAL

The *zoological* collections have been specially selected and prepared to illustrate the courses of study in natural history, and to present a synoptical view of the zoology of the state.

The mounted mammals comprise an unusually large and instructive collection of the ruminants of our country, including male and female moose, elk, bison, deer, antelope, etc., and also several quadrumana, large carnivora and fur-bearing animals, numerous rodents, good representative marsupials, cetaceans, edentates, and monotremes. Fifty-

nine species of this class are represented by one hundred and one specimens and all the others, excepting the Sirenia, are represented by mounted skeletons. There is also a series of dissections in alcohol, illustrating the comparative anatomy of the group.

The collection of mounted birds includes representatives of all the orders and families of North America, together with a number of characteristic tropical, Bornean, and New Zealand forms. The collection is practically complete for Illinois species. There is also a fine collection of the nests and eggs of Illinois birds. A series of several hundred unmounted skins is available for the practical study of species, and the internal anatomy is shown in alcoholic dissections, and in mounted skeletons of all the orders.

The cold-blooded vertebrates are represented by a series of mounted skins of the larger species, both terrestrial and marine; mounted skeletons of typical representatives of the principal groups; alcoholic specimens, both entire and dissected, and casts. The alcoholics include series of the reptiles, amphibians, and fishes, the latter comprising about 300 species. The dissections illustrate the internal anatomy of the principal groups. The casts represent about seventy five species, nearly all fishes.

The Mollusca are illustrated by alcoholic specimens of all classes and orders, and dissections showing the internal anatomy of typical forms. There are several thousand shells belonging to 1,700 species. The collection of Illinois shells is fair but incomplete.

The collection of insects has been greatly extended and enriched by the Bolter Collection, donated to the University by the executors of the estate of the late Andreas Bolter, of Chicago, which now contains over 16,000 species, represented by about 120,000 specimens, named, labeled, and systematically arranged.

The lower invertebrates are represented by several hundred dried specimens and alcoholics, and by a large series of the famous Blaschka glass models.

The embryology of vertebrates and invertebrates is illustrated by several sets of Ziegler wax models, and numerous series of slides, sections, and other preparations.

In addition to the above, the extensive collections of the State Laboratory of Natural History are available for illustrative purposes, as well as for original investigation by advanced students.

ART GALLERY

The University Art Gallery was the gift of citizens of Champaign and Urbana. It occupies a room in the basement of the Library Building, and furnishes an excellent collection of models for students of art. In sculpture it embraces thirteen full-size casts of celebrated statues, forty statues of reduced size, and a large number of busts and bas-reliefs, making in all over 400 pieces. It includes also hundreds of large autotypes, photographs, and fine engravings, representing many of the great masterpieces of painting of nearly all the modern schools, and a gallery of historical portraits, mostly large French lithographs, copied from the great national portrait galleries of France.

Other collections of special value to art students embrace a large number of casts of ornament from the Alhambra and other Spanish buildings, presented by the Spanish government; a set of casts from Germany, illustrating German renaissance ornament; a series of art works from the Columbian Exposition; and large numbers of miscellaneous casts, models, prints, and drawings, such as are usually found in the best art schools.

LIBRARIES

The general University library, the library of the State Laboratory of Natural History, that of the Agricultural Experiment Station, and that of the College of Law are all at the University in Urbana. The libraries of the College

of Medicine and the Schools of Pharmacy and Dentistry are in Chicago.

The general University library, including the Agricultural Experiment Station library, contains 71,039 volumes and 11,000 pamphlets. The reading room contains over 3,100 bound volumes of periodicals. The University has a subscription list of 878 periodicals, the current numbers of which are kept in the reading room. The library of the State Laboratory of Natural History contains 5,350 volumes and 15,850 pamphlets. The Library of the College of Law contains the Federal and State Reports, the leading text-books, and a line of leading periodicals. The department of education has made a special collection of about 1,500 books and 3,000 pamphlets, which are kept in the rooms of the department in University Hall. This collection contains a very good assortment of modern text-books, and copies of the courses of study of nearly all the large city school systems.

The libraries of the College of Medicine and of the Schools of Pharmacy and Dentistry are described further on in the catalog, in connection with these institutions.

The general library at the University is open daily, except Sunday, from 8 a. m. until 5 p. m., and from 6:30 p. m. until 9 p. m. on Mondays, Tuesdays, Wednesdays, and Thursdays. The reading rooms are open from 8 a. m. until 9 p. m. on Mondays, Tuesdays, Wednesdays, and Thursdays, and until 5 p. m. Fridays and Saturdays.

The Public Library of the City of Champaign contains the valuable library of western history collected by Edward G. Mason, Esq., long President of the Chicago Historical Society. The collection is thus made accessible to University students.

ADMISSION

Applicants for admission to the freshman class must be at least sixteen years of age.

Entrance may be made at any time, provided the candidate is competent to take up the work of the classes then in progress; but it is better to begin upon the first collegiate day in September.

Admission to the freshman class of the University may be obtained in one of three ways: (a) by certificate from a fully accredited high school; (b) by examination; (c) by transfer of credits from some other college or university.

ADMISSION BY CERTIFICATE FROM ACCREDITED HIGH SCHOOLS

The University employs a high school visitor, whose business is to inspect the high schools of the state. The University bears the expense of such inspection, but does not send the visitor to any school not already accredited until a request is made for such visit, together with a report on the work of the school which shows that its course of study is such as to merit the attention of the University. After inspecting a school the visitor reports upon it to the Council of Administration of the University, and upon approval the school is added to the list of accredited schools. Students coming to the University from an accredited school are excused from entrance examinations in those subjects which they have pursued there satisfactorily and which are accepted for admission to the University. The University accredits all work which is sufficiently well done. The

schools in the list below are therefore not all accredited for the same amount of work, nor for the same subjects.

In all subjects required for admission to the University, other than those for which his school is accredited, the candidate for admission must pass an examination or take the work in the Preparatory School of the University.

Candidates for admission from accredited schools must file with the Registrar, upon entrance, a certificate of graduation and a certified list of the preparatory studies for which they received credit in the high school. Blanks for these certificates should be obtained from the Registrar in advance and forwarded to him for approval before registration days.

LIST OF ACCREDITED SCHOOLS

The following high schools, having all the prescribed credits, and enough others to make up the total number (42) of required credits, are in the list of fully accredited schools:

SCHOOL	SUPERINTENDENT	PRINCIPAL
Aledo	Fred N. Taylor	Mollie P. Taylor
Alton	R. A. Haight	J. E. Turner
Amboy	F. W. Dunlap	Harold James
Anna	E. E. McLaughlin	W. P. Miller
Arcola	A. F. Lyle	Mary Ewing
Atlanta	Anthony Middleton	Bertha Denning
Aurora (East)	C. M. Bardwell	C. L. Phelps
Aurora (West)	A. V. Greenman	Claude P. Briggs
Beardstown	Joseph Hutton	Elva J. Saunders
Belvidere (North)	A. H. Knapp	Flora Fellows
Belvidere (South)	C. H. LeVitt	O. O. Townsend
Bement	Arthur Verner	George S. Wilson
Bloomington	J. K. Stableton	Edwin L. Boyer
Blue Island	(Township High School)	J. E. Lemon
Burlington, Ia.	Francis M. Fultz	Maurice Ricker
Cairo	Taylor C. Clendenen	Clyde Slone
Canton	G. W. L. Meeker	J. H. Browning
Carlinville	J. E. Wooters	Margaret Hubbard
Carlyle	John W. Fisher	M. N. Todd
Carmi	R. W. Jennings	J. C. Kern
Carrollton	J. R. Sparks	Wm. J. McFarland
Carthage	M. Andrews	Emily C. Pennock
Carthage College Academy		W. K. Hill
Centralia	(Township High School)	C. H. Elliott

SCHOOL	SUPERINTENDENT	PRINCIPAL
Champaign	Joseph Carter	Lottie Switzer
Charleston	DeWitt Elwood	I. M. Allen
Chenoa	E. W. Davis	A. Agnes Dillon
Chicago—		
Austin	E. G. Cooley	Geo. H. Rockwood
Calumet	"	Avon S. Hall
Englewood	"	James E. Armstrong
R. T. Crane Manual		
Training High		
School	"	Albert R. Robinson
Hyde Park	"	Charles W. French
Jefferson	"	Charles A. Cook
Lake	"	Edward T. Stearns
Lake View	"	Benjamin F. Buck
McKinley	"	George N. Clayberg
Marshall	"	Louis J. Block
Medill	"	Edward C. Rosseter
Northwest Division	"	Franklin P. Fisk
Robert A. Waller	"	Oliver S. Westcott
South Chicago	"	Charles I. Parker
Wendell Phillips	"	Spencer R. Smith
Chicago Heights	(Township High School)	Edward Sargent
Chicago Manual Training	H. H. Belfield, Director	
Chrisman	J. C. Arnold	Helen Booker
Clinton	F. L. Horn	Martha Hunt
Clinton, Ia.	O. P. Bostwick	J. S. McGowan
Clyde	(Township High School)	H. V. Church
Covington, Ind.	H. S. Kaufman	S. H. Hall
Danville	L. H. Griffith	A. D. Martin
Davenport, Ia.	J. B. Young	W. D. Wells
Decatur	E. A. Gastman	S. W. Ehrman
De Kalb	(Township High School)	Frederick Giles
Delavan	C. D. Garlough	Carl Waldron
Dixon (North)	H. V. Baldwin	Mary Burd
Dixon	L. B. Neighbor	B. F. Bullard
Downer's Grove	O. M. Searles	Edith E. Rodkey
Dubuque, Ia.	F. T. Oldt	F. L. Smart
Dundee	Julia M. Gay	Julia M. Gay
Du Quoin	C. W. Houk	M. S. Moore
Dwight	R. C. Rennick	Pearl Bryning
Earlville	G. V. Clum	John Clum
East St. Louis	John E. Miller	C. L. Manners
Edwardsville	F. M. Birney	Chas. F. Ford
Elgin	M. A. Whitney	E. J. Kelsey
Elgin Academy		Geo. Newton Sleight
Elmhurst Evangelical	Proseminar	D. Irion, Pres.
Elmwood	C. S. Stewart	C. S. Stewart
El Paso (East)	J. L. Pricer	Frances Dace
Eureka	Wm. Hawks	Louise Gill
Evanston	(Township High School)	Henry L. Boltwood

SCHOOL	SUPERINTENDENT	PRINCIPAL
Fairbury	E. C. Greene	Myrtle F. Ballard
Farmer City	C. C. Covey	Effie M. Tull
Freeport	S. E. Raines	L. A. Fulwider
Galena	Phil Clark	Clark Emory
Galesburg	W. L. Steele	F. D. Thompson
Galva	Fred U. White	Anna E. Edwards
Geneseo	Henry H. Frost	L. G. Cooper
Geneva	Emelyn Gardner	Sara P. Sherman
Gibson City	A. P. Johnson	Margaret Nicholson
Gilman	F. A. Gilbreath	A. Mae Matheney
Girard	Heywood Coffield	J. H. McCallister
Greenville	E. B. Brooks	Charles Beesley
Griggsville	D. P. Hollis	Clara Penstone
Harrisburg	(Township High School)	Harry Taylor
Harvard	R. G. Jones	Minnie L. Jones
Harvey	(Township High School)	J. E. Cable
Havana	W. H. D. Meier	Mrs. Sara E. Pierce
Henry	Henry Tupper	Mary T. Smeltzly
Hillsboro	Samuel T. Robinson	William S. Harris
Hinsdale	H. J. Jokisch	Louis Gibbs
Hoopeston	S. A. D. Harry	M. C. Murray
Illinois Women's College (Jacksonville)		Jos. R. Harker, Pres.
Jacksonville	E. E. Webster	A. H. Glasgow
Jerseyville	J. Pike	Edward B. Shafer
Joliet	(Township High School)	J. Stanley Brown
Kankakee	Franklin N. Tracy	Isaac E. Neff
Keokuk, Ia.	O. W. Weyer	Jesse Benjamin
Kewanee	J. N. Adee	John B. Cleveland
La Grange	(Township High School)	E. R. Cole
Lake Forest Academy		Wm. N. McKee
Lanark	C. A. Langworthy	Mrs. C. A. Langworthy
La Salle	(Township High School)	Thos. McCormick
Le Roy	S. K. McDowell	Elsa U. Nilson
Lewistown	B. C. Moore	Claude Belts
Lexington	H. B. Fisher	Miriam Douglas
Lincoln	L. D. Ellis	O. Reynolds
Litchfield	C. E. Richmond	A. A. Neisler
Lockport	G. N. Snapp	R. F. Glosup
McLeansboro	W. C. Fairweather	W. F. Thrall
Macomb	W. W. Earnest	Charles Lawyer
Mansfield	Nellie Yunk	Rose J. Young
Marengo	Chas. W. Groves	Florence Ringle
Marion	J. W. Asbury	W. A. Cook
Marseilles	F. M. Kline	F. M. Kline
Marshall	(Township High School)	B. A. Sweet
Mason City	T. W. B. Everhart	Mrs. Emma Naylor
Mattoon	G. P. Randle	William Wallis
Mendota (East)	W. R. Foster	W. R. Foster
Mendota (West)	Chas. Parkinson	Myra J. Howes
Metropolis	T. F. McCartney	S. A. Miller

SCHOOL	SUPERINTENDENT	PRINCIPAL
Minonk	J. H. Grigg	Ethel Howells
Moline	Girard T. Smith	F. A. Thomas
Momence	R. E. Selby	J. R. Steagall
Monmouth	B. F. Armitage	W. L. Hanson
Monticello	J. T. Gale	Geo. W. Black
Morgan Park	(Township High School)	J. H. Heil
Morris	G. S. Wuthrich	Joseph Hunter
Mt. Carmel	W. S. Booth	J. E. Ramsey
Mount Carroll	J. F. Casebeer	M. D. Forrest
Mount Morris College	(Preparatory)	John E. Miller, Pres.
Mount Pulaski	G. B. Coffman	A. B. Dorman
Mount Sterling	J. H. Ehlers	Minnie Duensing
Mount Vernon	E. E. Van Cleve	Renzo Muckelroy
Murphysboro	(Township High School)	Ellis H. Rogers
Newton	Charles Bevis	R. D. Wyatt
New Trier Township	High School (Kennilworth)	B. D. Parker
Nokomis	Harry C. Miller	Charlotte Holmes
Normal	E. A. Fritter	L. F. Fulwiler
North Park College	(Chicago)	D. Nyvall, Pres.
Oak Park	(Township High School)	John Calvin Hanna
Olney	George D. Wham	James W. Barrow
Onarga	J. H. Whitten	Laura McChesney
Oregon	E. S. Hady	Katherine Kinnison
Ottawa	(Township High School)	J. O. Leslie
Pana	William Miner	W. D. Butcher
Paris	H. W. Monical	Bertha Miller
Paxton	O. J. Bainum	E. T. Ebersol
Pekin	J. J. Crosby	Asa Heitt
Peoria	N. C. Dougherty	Alf. W. Beasley
Petersburg	H. E. Waits	Chas. Leckrone
Pittsfield	Wm. Calhoun	Margaret Lampe
Plano	J. R. Freebern	Grace Garnett
Polo	F. D. Haddock	W. D. Smith
Pontiac	(Township High School)	C. E. De Butts
Princeton	(Township High School)	H. S. Magill, Jr.
Quincy	D. B. Rawlins	V. K. Froula
Rantoul	E. H. Miller	Anna S. Hunter
Riverside	A. F. Ames	Edward L. Hardy
Robinson	I. C. Reubelt	G. H. Henry
Rochelle	C. E. Joiner	Etta M. Hunter
Rock Falls	Theodore Haney	Etta Grunewald
Rockford	P. R. Walker	E. Graff
Rock Island	H. B. Hayden	H. E. Brown
Roseville	(Township High School)	B. M. Hendricks
Rossville	I. A. Smothers	L. B. Mull
Rushville	H. H. Edmunds	J. G. Maroe
St. Charles	W. R. Hatfield	H. Lavinia Moore
St. Louis, Mo.	F. Louis Soldan	W. J. S. Bryan
St. Mary's Academy	(Joliet)	Rev. M. Ignatin
Sandwich	W. W. Woodbury	O. M. Edwards

SCHOOL	SUPERINTENDENT	PRINCIPAL
Savanna	(Township High School)	W. S. Wallace
Sheffield	J. A. Taylor	J. A. Taylor
Shelbyville	A. C. Cohagan	Nora Simmons
Sheldon	J. J. Ferguson	W. C. Chapman
Southern Illinois State	Normal (Carbondale)	High School Dept.
Sparta	S. B. Hood	L. J. Sexton
Springfield	J. H. Collins	L. M. Castle
Sterling	(Township High School)	E. T. Austin
Streator	(Township High School)	R. R. Upton
Sugar Grove	E. M. Harris	E. M. Harris
Sullivan	T. L. Cook	M. S. Vance
Sycamore	H. A. Bone	Sarah Robinson
Taylorville	(Township High School)	Wm. E. Andrews
Terre Haute, Ind.	William Wiley	C. J. Waits
Toulon Academy		G. H. Pollard
Tuscola	E. E. Giltner	F. C. Bohannon
Urbana	J. W. Hays	John O. Laugman
Vienna	M. N. McCartney	Nat Boomer
Virden	Josiah Main	Laura Dayton
Washington	J. H. Heinzelman	L. I. Knight
Waukegan	Miriam Besley	W. J. Stebbins
Western Military Academy	(Upper Alton)	A. M. Jackson
Wheaton	J. B. Russell	Ella M. Gregg
Whitehall	C. E. Avis	Isabelle Anderson
Wilmington	S. E. Houston	S. E. Houston
Woodstock	C. W. Hart	J. F. Groves
Wyoming (South)	J. B. Wallace	Margaret Dixon

Following are the partially accredited schools:

Ashland	J. E. Shivers	Petra Dahl
Astoria	U. S. Collins	Anna S. Parks
Auburn	C. E. Barker	C. E. Barker
Augusta	S. Douglas Faris	Lester Barnes
Belleville	Geo. H. Busick	H. W. Brua
Biggsville	(Township High School)	E. C. Cavins
Bunker Hill	P. M. Hoke	P. M. Hoke
Bushnell	W. H. H. Miller	W. H. H. Miller
Byron	A. R. Mize	A. R. Mize
Cambridge	J. N. Markle	Lucy Lyford
Camp Point	S. S. Simpson	Gertrude Smart
Casey	J. D. McMeen	L. A. Wallace
Cerro Gordo	F. S. Betz	Annie Mitchell
Chatsworth	H. L. Kessler	Myrta Fairfield
Chester	J. M. Dickson	D. O. Jones
Chillicothe	H. A. Stotler	Kate Scarry
Colfax	Mary Hotsenpeller	Iva Mercer
Collinsville	S. J. Curlee	Roy Wilkins
Effingham	C. W. Yerkes	Margaret Meneeley
El Paso (West)	H. M. Anderson	Helen Tuthill

SCHOOL	SUPERINTENDENT	PRINCIPAL
Fairfield	W. G. Cisne	N. W. Draper
Farmington	Lyman B. Mansell	Gertrude Neal
Flora	J. M. Stephens	Genevieve Jepson
Forrest	W. H. Martin	Genevieve Sloan
Grand Prairie Seminary (Onarga)		Frank G. Barnes
Granite City	L. P. Frohardt	Mrs. Ella Miller
Greenfield	H. G. Russell	Helen G. Russell
Greenview	Robert C. Hiatt	Esther Theil
Hebron	W. E. King	Katherine Robinson
Highland	Wm. M. Valentine	A. E. Arendt
Highland Park	(Township High School)	R. L. Sandwick
Hume	Harry Askin	Harry Askin
Kansas	W. R. Spurrier	W. R. Spurrier
Knoxville	W. F. Jones	Emma Mowrey
Lacon	Chas. Knapp	Dorothy Stonebraker
La Harpe	A. S. Anderson	C. S. Coulson
Lena	Jay R. Inman	Sue L. Wilson
Maroa	Geo. S. Morris	Eugenie Shinn
Martinsville	Norman Bennett	E. L. McCabe
Moweaqua	Wm. Harris	Wm. Harris
Nashville	F. C. Prowdley	J. C. Chapin
Newman	O. R. Hedden	Anna Hawkins
Oakland	J. G. Koons	Mrs. O. L. Minter
Odell	C. F. Van Doren	Thyra Ruth
Palatine	M. L. Smyser	M. L. Smyser
Pawpaw	R. B. Kleinsmid	J. B. Whelan
Pecatonica	B. F. Kepner	B. F. Kepner
Plainfield	L. H. Darling	L. H. Darling
Princeville	W. R. Bowlin	W. R. Bowlin
Roodhouse	H. T. White	E. W. Davis
Salem	A. E. Gilpin	Ella Spencer
Tiskilwa	A. M. Blood	A. M. Blood
Vandalia	W. H. Pyle	A. M. Newton
Vermillion Academy (Vermillion Grove)		Frank H. Clark
Virginia	Henry Jacobs	Kate Bellersheim
Warren	J. F. Selleck	Olivette M. Buser
Warsaw	L. Fairfax	George Perrin
Watseka	H. E. Skinner	O. M. Zoll
Waverly	J. C. Walters	J. C. Walters
Wenona	H. J. Bassler	Jessie Rainbo
Winchester	B. F. Parr	Laura M. Truscott
Yorkville	E. C. Thomas	Sopha McCleary

ADMISSION BY EXAMINATION

Examinations of candidates for admission to the University are held at the University in September (see program, p. 71). Each candidate must be in attendance during the whole period of examinations.

The scholarship examinations¹, held each year on the first Saturday in June, in the several counties of the state, afford an opportunity to pass a part of the entrance examinations before coming to the University.

The subjects upon which the entrance examinations are held are described below.

When text-books are named it is merely to aid in explaining the requirements. Equivalents are accepted.

In all cases 42 credits are required, the term credit meaning the amount of work represented by the continuous pursuit of one subject, with daily recitations, through one of the three terms of the high school year; or, in other words, the work of sixty recitation periods of forty minutes each, or the equivalent in laboratory or other practice. Of these 42 credits, 17 must be obtained by all candidates in the subjects, and according to the valuation, stated in the prescribed list given below. The remainder of the 42 may be made up by offerings in any of the subjects in the elective list given below, with the following restrictions and provisions:

1. No offering will be accepted in any one of these elective subjects unless at least equal in quantity to the minimum specified in the table. For example: Astronomy is listed for from 1 to 1½ credits. Nothing less than one term's work, that is, one credit, will be accepted, therefore, in that subject.

2. Those who wish to enter upon courses leading to the degree of bachelor of arts in *Literature and Arts* must offer three credits in history and nine² credits in foreign language, in addition to the 17 credits prescribed for all candidates. The candidate must then make up the remainder of the required credits by offerings from the elective list. Those who wish to pursue the study of Latin in the University must offer at least nine credits in Latin.

3. Those who wish to enter upon courses leading to

¹See State Scholarships, p. 315.

²At least six of these must be in the same language.

the degree of bachelor of arts *in science*, or of bachelor of science in *science, engineering, or agriculture*, must offer in addition to the seventeen credits prescribed for all candidates, six credits in science. They must then make up the remainder of the necessary credits with electives; but engineering students must offer solid and spherical geometry.

4. Those who wish to enter the course leading to the degree of bachelor of laws must offer, in addition to the seventeen credits prescribed for all candidates, three credits in English and American History and any subjects chosen from the elective list sufficient to make up the number of credits required for entrance.

5. Those who wish to enter upon a course leading to the degree of bachelor of music must offer, in addition to the 17 credits prescribed for all candidates, three credits in history, nine¹ in foreign language, and six in music. The remainder of the required forty-two credits must then be made up with subjects from the elective list. The work which is accepted for the six credits in music is described in courses 6, 11, 14, on pages 283-4, but these credits may be obtained only by examination at the University.

SUBJECTS ACCEPTED FOR ADMISSION, WITH CREDITS

Prescribed for All Candidates.

Algebra	5 credits
English Composition	3 credits
English Literature	6 credits
Geometry, Plane	3 credits

Elective

Astronomy	1 to 1½ credits
Botany	1½ to 3 credits
Chemistry	2 to 3 credits
Civics	1 to 3 credits
Drawing	1 to 3 credits
French	3 to 9 credits
Geology	1½ to 3 credits
Geometry, Solid and Spherical.....	1 credit

¹At least six of these must be in the same language

German	3	to 12	credits
Greek	3	to 7	credits
History	3	to 9	credits
Latin	3	to 12	credits
Physics	3		credits
Physical Geography.....	1½	to 3	credits
Physiology	1	to 3	credits
Zoölogy	1½	to 3	credits

DESCRIPTION OF SUBJECTS ACCEPTED FOR ADMISSION

The amount of work in each subject which, in the judgment of the University authorities, corresponds to the minimum number of credits assigned is shown by the description of subjects below:

1. ALGEBRA.—Fundamental operations, factoring, fractions, simple equations, involution, evolution, radicals, quadratic equations and equations reducible to the quadratic form, surds, theory of exponents, and the analysis and solution of problems involving these.

2. ASTRONOMY.—To obtain a single credit for entrance in astronomy, the student must pass an examination covering as much text-book work as is contained in any good text. For 1½ credits, the entrance requirement implies, in addition to the above, some degree of practical familiarity with the geography of the heavens, with the various celestial motions, and with the positions of some of the more conspicuous naked-eye heavenly bodies.

3. BOTANY.—A familiar acquaintance is required with the general structure of plants, and of the principal organs and their functions, derived to a considerable extent from a study of the objects; also a general knowledge of the main group of plants, and the ability to classify and name the more common species. Laboratory note-books and herbarium collections should be presented.

4. CHEMISTRY.—The instruction must include both text-book and laboratory work. The work should be so arranged that at least one-half of the time shall be given to the laboratory. The course, as it is given in the best high schools in two terms or three terms, respectively, will satisfy the requirements of the University for the two credits or three credits for admission. The laboratory notes, bearing the teacher's indorsement, must be presented in evidence of the actual laboratory work accomplished. Candidates for admission may be required to demonstrate their ability by laboratory tests.

5. CIVICS.—Such amount of study on the United States constitution, its history and interpretation, as is indicated by any of the usual high-school text-books on civil government, is regarded as sufficient for one term. The work may advantageously be combined with the elements of political economy.

6. COMPOSITION AND RHETORIC.—Correct spelling, capitalization, punctuation, paragraphing, idiom, and definition; the elements of rhetoric. The candidate will be required to write two paragraphs of about one hundred and fifty words each to test his ability to use the English language.

7. DRAWING.—Free-hand or mechanical drawing, or both. Drawing-books or plates must be submitted. The number of credits allowed depends on the quantity and quality of the work submitted.

8. ENGLISH LITERATURE.—(a) Each candidate is expected to have read certain assigned literary masterpieces, and will be subjected to such an examination as will determine whether or not he has done so. The books assigned for the next three years are as follows:

1905.—The Sir Roger de Coverley Papers; Carlyle's Essay on Burns; Coleridge's Ancient Mariner; George Eliot's Silas Marner; Goldsmith's Vicar of Wakefield; Lowell's Vision of Sir Launfal; Scott's Ivanhoe; Shakspeare's Merchant of Venice; Shakspeare's Julius Cæsar; Tennyson's Princess.

1906 and 1907.—The Sir Roger de Coverley Papers; Coleridge's Ancient Mariner; George Eliot's Silas Marner; Lowell's Vision of Sir Launfal; Scott's Ivanhoe; Scott's Lady of the Lake; Shakspeare's Merchant of Venice; Shakspeare's Macbeth; Tennyson's Gareth and Lynette, Lancelot and Elaine; The Passing of Arthur; Irving's Life of Goldsmith.

(b) In addition to the above the candidate will be required to present a careful study of the history of either English or American Literature.

(c) The candidate will be examined on the form and substance of certain books in addition to those named under (a). For 1905. 1906 and 1907 the books will be selected from the list below. The examination will be of such a character as to require a minute study of each of the works named, in order to pass it successfully. The list is:

1905.—Shakspeare's Macbeth; Milton's L'Allegro, Il Penseroso, Comus, and Lycidas; Burke's Speech on Conciliation with America; Macaulay's Essays on Milton and Addison.

1906 and 1907.—Shakspeare's Merchant of Venice; Milton's L'Allegro, Il Penseroso, Comus, and Lycidas; Burke's Speech on Conciliation with the Colonies; Macaulay's Essays on Addison and Johnson.

9. FRENCH.—*One year's work.*—The candidate must have a thorough knowledge of elementary grammar and the irregular verbs; must be able to pronounce correctly, and to translate simple spoken French phrases. He must have read some 300 pages of easy prose, including one modern comedy, and must be able to translate ordinary French prose at sight.

Two years' work.—In addition to the above, the candidate must show proficiency in advanced grammar, the essentials of syntax, and elementary composition. The reading of not less than 400 pages of standard authors, including two plays of Molière, is required.

Three years' work.—In addition to what has already been described, the candidate must have had further work in composition. He must further have read not less than 500 pages of standard authors, including Molière, La Fontaine, and Hugo. Some acquaintance with modern lyrics is necessary.

10. GEOLOGY.—Familiarity with the principles of dynamic and structural geology, and some acquaintance with the facts of historical geology as presented in Scott's Introduction to Geology, Brigham's Text-book of Geology, or an equivalent, together with at least an equal amount of time spent in laboratory and field work, will be required for 1½ credits.

The laboratory work should follow one or more of the lines indicated below, and note books should be presented showing the character and the amount of work done.

1. Studies of natural phenomena occurring in the neighborhood, which illustrate the principles of dynamic geology. Each study should include a careful drawing of the object, and a written description of the way in which it was produced.

2. Studies of well-marked types of crystalline, metamorphic and sedimentary rocks, which will enable the student to recognize each type and state clearly the conditions under which it was formed.

3. Studies of minerals of economic value, including the characteristics of each, its origin, and the uses to which it is put.

4. Studies of the types of soil occurring in the neighborhood, including the origin of each and the cause of differences in appearance and fertility.

11. GEOMETRY.—(a) *Plane Geometry*. Special emphasis is placed on the ability to use propositions in the solution of original numerical exercises and of supplementary theorems.

(b) *Solid and Spherical Geometry*. Applications to the solutions of original exercises are emphasized.

12. GERMAN.—*One year's work*.—Elementary grammar. Besides the work in grammar, the student should read not less than 150 pages of easy narrative, or descriptive prose.

Two years' work.—In addition to the work outlined under the one year's requirement, the pupil should know the syntax of cases, uses of the subjunctive and infinitive, complex sentence structure, uses of modal auxiliaries and of participial constructions. As an additional reading requirement, from 250 to 300 pages should be translated. Prose composition.

Three years' work.—The third year's study should aim to secure an easy reading knowledge of the language. Standard prose of the grade represented by Freytag, Dahn or Keller, not less than 100 pages, should be read, together with selections from the easier classic dramas. Schiller's *Wilhelm Tell*, or *Jungfrau von Orleans*.

13. GREEK.—To obtain three credits, the exercises in any of the beginning books, and one book of the *Anabasis*, or its equivalent, must be offered. For six credits, two books of the *Anabasis* and three of Homer, or their equivalents, additional to the above, must be presented, together with an amount of Greek prose composition equal to one exercise a week for one year.

14. HISTORY.—No subjects are definitely prescribed in this department, but the following are recommended as best adapted to the high school program:

(1) For a course of one year only, the history of England and of the United States.

(2) For a course of two years, the following subjects, or any two of them: The History of Greece and Rome, the History of England, the History of the United States.

(3) For a course of three years, one year in each of the three subjects named in (2).

For the present, *Elementary* examinations will be offered in the following subjects: (a) The History of England and the United States, (b) the History of Greece and Rome, (c) General European History. *Advanced* examinations may also be taken in any one of the subjects above named, which has not been offered to meet the elementary requirements. The examination in each of these subjects is intended to cover one full year of high school work.

The statement of requirements in each subject implies the use of a substantial text-book, some elementary training in the use of reference books, and some instruction in historical geography.

15. **LATIN.**—*First year's work.*—Such knowledge of inflections and syntax as is given in any good preparatory Latin book, together with the ability to read simple fables and stories.

Second year's work.—Four books of Cæsar's Gallic War, or its equivalent in Latin of equal difficulty. The ability to write simple Latin based on the text.

Third year's work.—Six orations of Cicero. The ability to write simple Latin based on the text. The simpler historical references and the fundamental facts of Latin syntax.

Fourth year's work.—The scansion of hexameter verse, six books of Vergil, with history and mythology.

16. **PHYSICS.**—One year's high school work covering the elements of physical science as presented in the best of the current high school text-books of physics. Laboratory practice in elementary quantitative experiments should accompany the text-book work. The candidate's laboratory note-book will be considered as part of the examination.

17. **PHYSIOGRAPHY.**—The amount and character of the work required for this credit may be seen by referring to the texts of Gilbert and Brigham, or Davis; the recitations must be supplemented by at least an equal amount of time devoted to laboratory work. The laboratory exercises should follow one or more lines such as are indicated below, each school selecting those which best fits its conditions. Each student should present a note-book showing exactly what he has done.

1. Studies in mathematical geography in which map and scale only are used. These should embrace such topics as length of a degree in longitude in various latitudes; length and breadth of continents, etc., in degrees and miles; relative latitude of places; distances between cities, etc., in degrees and miles; difference in length of parallels and meridians; problems in time; location of time belts, etc.

2. Studies of local topographic features which illustrate the various phases of stream work. Each study should include a drawing or topographic map of the object and a full, clear description of the way in which it was formed.

3. Studies of glacial deposits as shown in terminal and ground moraines, kames, eskers, etc.; distribution of dark and light colored

soils; occurrence of lakes, ponds, gravel beds, clay banks, and water-bearing strips of sand and gravel.

4. Studies of stream work as shown on the topographical sheets which may be obtained from the United States Geological Survey at nominal cost.

5. Studies of the form, size, direction and rate of movement of high and low barometer areas, and the relation of these to direction of wind, character of cloud, distribution of heat, and amount of moisture in the air, as shown in the daily weather maps. Later these studies should lead to the making of weather maps from the data furnished by the daily papers, and to local prediction of weather changes based on the student's own observations.

6. Studies of the climate of various countries compared with our own, the necessary data being derived from such topographic, rainfall, wind, current, and temperature maps as are found in Sydow-Wagner's or Longman's atlases.

18. PHYSIOLOGY.—For one credit are required the anatomy, histology, and physiology of the human body and the essentials of hygiene, taught with the aid of charts and models to the extent given in Martin's Human Body (Briefer Course). For more than one credit, the course must include practical laboratory work. The number of credits, beyond one, will be determined in each case according to the quantity and quality of the work.

19. ZOOLOGY.—The instruction must include laboratory work equivalent to four periods a week for a half year, besides the time required for text-book and recitation work. Note-books and drawings must be presented which shall show the character of work done and the types of animals studied. The drawings are to be made from the objects themselves and not copied from illustrations, and the notes are to be a record of the student's own observation on the animals examined. The amount of equipment and character of surroundings must, of course, determine the nature of the work done and the kind of animals studied, but in any case the student should have at least a fairly accurate knowledge of the external anatomy of each of eight or ten animals distributed among several of the larger divisions of the animal kingdom, and should know something of their life histories and of their more obvious adaptations to environment. It is recommended that especial attention be given to such facts as can be gained from a careful study of the living animal. The names of the largest divisions of the animal kingdom with their most important distinguishing characters and

illustrative examples, selected when practicable from familiar forms, ought also to be known.

¹PROGRAM OF EXAMINATIONS, SEPTEMBER 13-16, 1905.

All persons who wish to enter the University in September, 1905, except those holding certificates of graduation from accredited schools and scholarship certificates, and those for whom a transfer of all entrance credits from some other college or university has already been approved, must present themselves at the Registrar's office, Library Building, at 9 o'clock a. m., Wednesday, September 13th. At that time application for admission will be received, and applicants will be given all necessary directions as to examinations.

The program of examination is as follows:

Chemistry, 2 or 3 credits.....	Wednesday	9:00 a. m.
Geology, 1½ or 3 credits	Wednesday	9:00 a. m.
Astronomy, 1 or 1½ credits	Wednesday	11:00 a. m.
History, 3 or 6 credits	Wednesday	1:00 p. m.
Physiography, 1½ or 3 credits	Wednesday	3:30 p. m.
English Literature, 6 credits	Thursday	8:00 a. m.
English Composition, 3 credits.....	Thursday	10:30 a. m.
Latin, 3 or 6 credits.....	Thursday	1:00 p. m.
Physics, 3 credits	Thursday	3:30 p. m.
Algebra, 4 credits.....	Friday	8:00 a. m.
Civics, 1 to 3 credits.....	Friday	10:30 a. m.
Geometry, Plane, 3 credits.....	Friday	1:00 p. m.
Geometry, Solid and Spherical, 2 credits..	Friday	2:45 p. m.
Physiology, 1 to 3 credits	Friday	3:30 p. m.
German, 3 or 6 credits.....	Saturday	8:00 a. m.
French 3 or 6 credits.....	Saturday	8:00 a. m.
German, 7 to 9 credits.....	Saturday	10:30 a. m.
French, 7 to 9 credits.....	Saturday	10:30 a. m.
Latin, 7 to 12 credits.....	Saturday	1:00 p. m.
Botany, 1½ to 3 credits	Saturday	1:00 p. m.
Zoölogy, 1½ to 3 credits.....	Saturday	3:30 p. m.

¹The examinations in 1906 will be held September 12-15.

The time for examination in Free Hand Drawing and in Manual Training will be arranged with candidates.

ADMISSION BY TRANSFER FROM OTHER COLLEGES AND UNIVERSITIES

A person who has entered another college or university of recognized standing will be admitted to this University upon presenting a certificate of honorable dismissal from the institution from which he comes and an official statement of the subjects upon which he was admitted to such institution, provided it appears that the subjects are those required here for admission by examination, or real equivalents. Candidates, to enter the University in this way, should submit such papers to the Registrar before the time of entrance, so that all doubtful points may be cleared up in advance.

ADMISSION AS SPECIAL STUDENTS

Persons over twenty-one years of age, not candidates for a degree, may be admitted to classes, after satisfying the President, and the professor in charge of the department in which such classes are taught, that they possess the requisite information and ability to pursue profitably, as special students, the chosen subjects. Such students are not matriculated; they pay a tuition fee of seven dollars and a half a semester, in addition to the regular incidental fee of twelve dollars.

After successfully completing thirty semester hours of university work, a special student may receive such credits toward matriculation on account of practical experience in the line of his course as the head of the department and the dean of the college may recommend, and the President of the University may approve.

In the College of Agriculture special students may be received at sixteen years of age, subject to the same conditions as other special students, except that they may hold scholarships in agriculture (p. 316); but if under eighteen

years of age, and unable to meet the requirements for admission to the freshman class (see pp. 63-71) they must take half their work in the Academy.

ADMISSION TO ADVANCED STANDING

After satisfying the entrance requirements for admission to the University, in some of the ways described, and after matriculating, the applicant for advanced standing may secure such standing either by examination or by transfer of credits from some other college or university.

1. *By Examination.*—Candidates for advanced standing, not from other colleges or universities, may secure such standing on examination. In the case of freshman students seeking advanced standing on the basis of their preparatory work, such standing shall be granted after satisfactory examination only, unless the applicants are from fully accredited schools. In that case a transfer of credits may be made as provided below.

2. *By Transfer of Credits.*—Credits from other colleges or universities may be accepted by the faculty for advanced standing; but at least one year's work in residence at the University is required of all candidates for a bachelor's degree.

In all cases a certificate of honorable dismissal is required, together with a certified record of work done in the institution from which the applicant comes. These should be presented for approval some time before the student enters for work.

Upon approval of the faculty, freshmen may receive a limited amount of credit for advanced work done in fully accredited high schools.

REGISTRATION

At the beginning of the first semester each student must present himself for registration within the time set for that purpose, before the formation of classes, and he must be present at the first exercise of each class he is to attend.

ADMINISTRATION OF THE UNIVERSITY

GOVERNMENT.—The government of the University is vested by law primarily in the Board of Trustees. This Board consists of nine members elected by the people for a term of six years. The term of three members of the Board expires every second year.

Besides the elective members, the Governor of the State, the President of the State Board of Agriculture, and the Superintendent of Public Instruction are *ex-officio* members.

The administration of the University is vested by the Trustees in the President of the University, the Senate, the Council of Administration, the faculties of the different colleges and the Deans.

The President is the administrative head of the University.

The Vice-President acts in case of the absence or disability of the President.

The Dean of the Graduate School has general oversight of the work of instruction in the University, with especial supervision of the Graduate School.

The Dean of each college is responsible for carrying out all University regulations within his college. He is required to keep the President informed of the condition and progress of his college, and in all ways to promote its welfare.

The Dean of Undergraduates acts as adviser to undergraduate male students and is charged with general care of the conduct of these students.

The Dean of Women acts as adviser to women students and is charged with general care of the conduct of these students.

The Council of Administration is composed of the President, the Dean of the Graduate School, the Dean of Undergraduates, the Dean of Women, and the Deans of the separate colleges. It constitutes an advisory board to the President, *and has exclusive jurisdiction over all matters of discipline.*

The Council does not determine educational policy; but when any matter arises which has not been provided for by common usage, or by rule of the Senate, and cannot be conveniently laid over till the next meeting of the Senate, the Council may act upon the same according to its discretion.

The Senate, composed of those members of the faculty in charge of separate departments of the various colleges and schools, is charged with the direction of the general educational policy of the University.

The faculties of the different colleges and schools of the University, composed of the members of the corps of instruction of these colleges and schools, have jurisdiction over all matters which pertain exclusively to these organizations, subject always to higher University authority.

ORGANIZATION.—For the purpose of more efficient administration, the University is divided into several colleges and schools. This division does not imply that the colleges and schools are educationally separate. They are interdependent, and together form a unit. The colleges and schools are as follows:

- I. The College of Literature and Arts.
- II. The College of Engineering.
- III. The College of Science.
- IV. The College of Agriculture.
- V. The Graduate School.
- VI. The School of Library Science
- VII. The School of Music.
- VIII. The College of Law.
- IX. The College of Medicine.
- X. The School of Pharmacy.
- XI. The School of Dentistry.

THE COLLEGE OF LITERATURE AND ARTS

The College of Literature and Arts offers a wide range of subjects¹ in philosophy and arts, including:

1. Art.
 2. The ancient classical languages.
 3. English literature and language, including rhetoric.
 4. The Romanic languages, including French, Italian and Spanish.
 5. The Germanic languages, including German, Scandinavian, and Danish.
 6. The political and social sciences, including history, economics, sociology, anthropology, and science of government.
- The work in economics is so developed and arranged that taken in combination with other subjects it furnishes
7. Courses of training for business.
 8. Philosophical subjects, including philosophy, mathematics, psychology, education and ethics.
 9. Library Science, consisting of three years' College work, followed by the first year in the School of Library Science.
 10. Household Science.

THE COLLEGE OF ENGINEERING

The College of Engineering offers courses—

1. In Architecture.
2. In Architectural Engineering.
3. In Civil Engineering.
4. In Electrical Engineering.
5. In Mechanical Engineering.
6. In Municipal and Sanitary Engineering.
7. In Railway Engineering.

THE COLLEGE OF SCIENCE.

The College of Science offers courses in—

1. General Science.
2. Chemistry.
3. Chemical Engineering.

¹Besides the subjects mentioned under each college and school at Urbana courses in Military Science and Physical Training are provided in all the colleges and schools.

4. Household Science.
5. Library Science.
6. Mathematics.
7. Physics.
8. Studies Preliminary to Medicine.

COLLEGE OF AGRICULTURE

The College of Agriculture offers courses in—

1. Agronomy.
2. Animal Husbandry.
3. Dairy Husbandry.
4. Horticulture.
5. Household Science.
6. Veterinary Science.

THE GRADUATE SCHOOL

The Graduate School offers courses in twenty-seven distinct subjects, as follows: Agronomy, Animal Husbandry, Architecture, Botany, Chemistry, Civil Engineering, Economics, Education, Electrical Engineering, English Language and Literature, French, Geology, German, Greek, History, Horticulture, Household Science, Latin, Mathematics, Mechanical Engineering, Municipal and Sanitary Engineering, Philosophy, Physics, Physiology, Psychology, Thremmatology, and Zoology.

For further information see "General Description of Courses," beginning on page 184. The distinctively graduate courses are usually numbered 101, 102, etc., under each subject, but some of the courses open to undergraduates may also be taken for credit towards an advanced degree. See Graduate School, page 142.

THE SCHOOL OF LIBRARY SCIENCE

The School of Library Science, or the State Library School, offers a course of study extending over five years, three of which are in either the College of Literature and Arts or the College of Science.* The last two years are

devoted to courses in Library Science in the Library School. The full course leads to the degree of bachelor of library science.

THE SCHOOL OF MUSIC

The School of Music offers courses in vocal and instrumental music, leading to the degree of bachelor of music.

THE COLLEGE OF LAW

The College of Law offers a course of study leading to the degree of bachelor of laws.

THE COLLEGE OF MEDICINE

The College of Medicine offers a course of study leading to the degree of doctor of medicine.

THE SCHOOL OF PHARMACY

The School of Pharmacy offers a course in all branches necessary to a complete scientific and practical knowledge of pharmacy, including pharmacy, chemistry, materia medica, botany, physics, and physiology. The course leads to the degree of graduate in pharmacy.

THE SCHOOL OF DENTISTRY

The School of Dentistry offers a course leading to the degree of doctor of dental surgery.

COLLEGE OF LITERATURE AND ARTS

The College of Literature and Arts includes those branches usually comprised in the department of liberal arts, with the exception of the natural sciences. The aim of the College is to furnish a liberal education, based on the humanities, and to afford opportunity for specialization in art, literature and language, history, economics, mathematics, philosophy, psychology, pedagogy, political science and administration.

REQUIREMENTS FOR GRADUATION

In order to graduate from the University in the College of Literature and Arts, the student must secure credit for 130 hours of study, including therein the prescribed military and physical training. Every student must take work aggregating at least eight hours of credit in each of the following groups of subjects, according to the conditions described below. The groups are:

I. English language and literature, including English and rhetoric.

II. Ancient and modern languages and literatures, including Greek, Latin, German, and Romanic languages.

III. Political science, including history, economics, and science of government.

IV. Mathematics and philosophy, including mathematics, education, philosophy and psychology.

V. Science, including astronomy, botany, chemistry, geology, physiology, physics, and zoology.

Conditions under which students must make their choice:

1. In his freshman year each student must select his course of study from at least three of the five groups mentioned above, and must include in his choice six hours¹ of rhetoric (rhetoric 1).

2. In Group II. the student is required to carry the language which he elects through at least the first university year of work. No credit is given for a part of the work of the first university year of any language.

3. In Group IV. a student who elects mathematics must take at least five hours of it, and is earnestly advised to take the subject through the year. If a student does not elect mathematics, his election in this group must include work in at least two of the other departments of the group. That is, if he does not take mathematics, he must take either philosophy and psychology, or philosophy and education, or education and psychology. With the exception of mathematics, no subject of this group is open to freshmen.

4. No credit is granted in any subject unless the student pursues it for the full time required in the shortest course offered in that subject. For example, if the student elects a course which yields two hours of credit for one semester, he must stay in the class during the semester in order to get any credit at all.

5. Every student must secure at least 24 hours of credit in some one department to be selected by him from the list of major subjects (see page 82). This subject shall be called his major.

6. Not more than 40 hours in any one department may be counted for graduation, excepting when the student is writing a thesis. In this case he may count, in addition to the 40 hours, the hours of the seminar course in which he does his thesis work.

¹For definition of "hour," see page 184.

7. According to the general University regulations, theses must be written by students who are candidates for special honors. Students not candidates for special honors may also write theses, on the approval of the head of the department in which they are doing their major work.

8. Students who hold *scholarships in household science* must make this subject their major. They must elect each semester at least four hours in household science, or in subjects required for admission to the household science courses. In their freshman year, household science students must elect household science 2 (Home Architecture and Sanitation), household science, (Selection and Preparation of Food), Chemistry 1 and 3b. They must then elect in regular course and finish by the end of the junior year, botany 5, chemistry 4, 5a or 13, and 5c, and an additional five hours in botany or zoology. In order to graduate, household science students must also secure credit for art and design 1, 16 (Theory of Color), 19 (History of Art), architecture 29 (History of Architecture), and economics 1 and 16B.

They must also satisfy the requirements for graduation in the College of Literature and Arts, in so far as these are not covered by the courses above mentioned.

ELECTIVES

A student may select his studies from as wide a range of subjects as he pleases, restricted only by the requirement that he shall take a minimum amount of work in each of the groups above mentioned, and secure 24 hours in some one.

The departments in which major work may be done are listed as major electives on page 82. If the student receives less than 24 hours' credit in one of these subjects, it is credited to him as minor work, as is also any subject not there listed, regardless of the time spent on it.

The elective minor courses open to the students of the College include subjects offered in the other colleges and

schools of the University. The Sciences are not an integral part of the work of the College of Literature and Arts, but they are so important a part of a liberal education that every student of the College is earnestly urged to extend his study of them as far as may be. Certain courses in the College of Engineering, in the College of Agriculture, in the School of Library Science, and in the College of Law, may also be counted for credit in the College of Literature and Arts. These are more particularly mentioned under "minor electives," below.

Students in the business courses must choose their major in economics. They must supplement the economics with the necessary work in science, materials of commerce, mechanical technology, language and law, and should follow closely the outline of the various courses given in full in the special circular on *Courses of Training for Business*.

MAJOR ELECTIVES

Following are the subjects which may be elected as majors. Minor work may be elected from those not chosen as majors.

Economics.	Latin.
Education.	Library Science.
English.	Mathematics.
French.	Philosophy.
German.	Political Science.
Greek.	Psychology.
History.	Rhetoric.
Household Science.	

MINOR ELECTIVES

The credits necessary for graduation, additional to those obtained in the prescribed subjects and the chosen major electives, may be secured from any subjects offered in the University whose election is approved by the Dean of the college. Among the subjects which may be thus chosen are several offered in the College of Literature and Arts. These are as follows:

Anthropology: Two courses are offered. See p. 194.

*Art and Design:*¹ Of this subject 20 hours, but no more, may be counted for the degree of bachelor of arts. The work of this department is so important for culture that every student should elect some of it.

Comparative Literature and Philology. See p. 220.

Italian and Spanish. See pp. 258, 302.

The following subjects in other colleges and schools of the University may also be taken as minors:

Architecture: Domestic Architecture (Arch. 27), and History of Architecture (Arch. 29).

Law: The following subjects in the College of Law are open to students in the College of Literature and Arts without fee: Constitutional Law (Law 22), Municipal Corporations (Law 24).

*Library Science:*² Elementary Reference (Lib. 2); Selection of Books (Lib. 3); History of Libraries (Lib. 7); Bibliography (Lib. 6); Advanced Reference (Lib. 8); Public Documents (Lib. 13); Book-Making (Lib. 9); Library Seminar (Lib. 14).

Music: History of Music (Mus. 1); Orchestra (Mus. 21); Choral Society (Mus. 22).

Any other course offered in the University may be taken, subject to the approval of the Dean and the professors concerned.

COURSE OF INSTRUCTION

FIRST YEAR

Fifteen to eighteen hours a week, including military and physical training, must be chosen each semester.

Military science and tactics are required of all male students. Drill extends through the freshman and sophomore years, and tactics through the second semester of the freshman year.

Physical training is required of all freshmen, men and women, two hours for men and three hours for women.

The following subjects are open to freshmen:

First Semester—

Art and Design 1.

English Literature and Rhetoric: English 1; Rhetoric 1, 7.

¹Special students may elect any amount of the subject.

²No library science, except course 12, may be elected before senior year.

Foreign Language: French 1; German 1; Greek 1 (for those who have not before studied Greek); Greek 5 (for those offering entrance credits in Greek); Italian 1; Latin 1 (for those offering 9 credits for entrance); Latin 2 (for those offering 12 credits for entrance); Spanish 1.

History and Political Science: History 1; Economics 7 and 26.

Mathematics 1 and 3, or 2 and 4.

Science: Astronomy 1; Botany 11; Chemistry 1; Entomology 1; Geology 3; Physical Geography (Geology 8); Zoölogy 10 and 1a.

Military 2.

Physical Training 1 and 3 for men; 7 and 9 (Physiol. 6) for women.

Second Semester—

Art and Design 1, 2.

English Literature and Rhetoric: English 4, 23 and 27; Rhetoric 1, 7, 11, 15.

Foreign Language: French 1; German 3; Greek 2; (after Greek 1); Greek 6 (after Greek 5); Italian 1; Latin 1 and 3; Spanish 1.

History and Political Science: History 1 and 11; Economics 22 and 26.

Mathematics 6.

Science: Astronomy 4; Chemistry 3a, 3b, and 4; Entomology 1; Geology 3; Physical Geography (Geography 8); Zoölogy 10.

Military 1 and 2.

Physical Training: 1 and 3 for men; 7 for women.

The work of the remaining years is elective, but the elections must include the necessary number of hours from each group as specified on page 79.

TRAINING FOR BUSINESS

Courses in economics, commerce, and industry are offered in combination with courses in language, law, science, and mechanical technology, with the aim of providing a university training for business life. The combined courses are designed to give the student a knowledge of the general principles that underlie all lines of business, with special training in the work of some particular calling.

The subjects of study are arranged to furnish training for (1) general mercantile business, (2) banking, (3) trans-

portation, (4) journalistic work, (5) insurance, (6) municipal administration, (7) consular and diplomatic service.

The work of the class-room is supplemented with lectures by practical specialists, and with visits of inspection to industrial and mercantile establishments.

The outline of the General Business Course and that of the course in Banking are given below. *The other courses are described in detail in a special circular, which may be had on application to the Registrar.*

GENERAL BUSINESS COURSE

First Year

1. Commercial Geography (Econ. 26); English Economic History (Econ. 7); English or French or German or Spanish or Italian; History 1; Military; Physical Training; Rhetoric and Themes (Rhet. 1).

2. Commercial Geography (Econ. 26); English or French or German or Spanish or Italian; Military; Physical Training; European History (Hist. 1); or Political History of England (Hist. 11); Rhetoric and Themes (Rhet. 1).

Second Year

1. Business Writing (Rhet. 10); English or foreign language continued; History of Commerce (Econ. 27); Military; Principles of Economics (Econ. 1); Science, chosen according to course.

2. Business Writing (Rhet. 10); Economic History of United States (Econ. 22); English or foreign language continued; Logic (Phil. 1); Money and Banking (Econ. 3); Military.

Third Year

1. Corporation Management and Finance (Econ. 10); Domestic Commerce (Econ. 28); Foreign language continued; Labor Problem (Econ. 12); Materials of Commerce.

2. Accounting; City Government (Govt. 3); Foreign Commerce (Econ. 29); Foreign language continued; Industrial Consolidations (Econ. 11); Materials of Commerce.

Fourth Year

1. Commercial Law (Law B); Commercial Policy of United States (Econ. 30), or Domestic and Foreign Markets of United States (Econ. 32); Elective; Practical Banking (Econ. 9); Thesis.
2. Commercial Law (Law B); Commercial Policy of United States (Econ. 30), or Domestic and Foreign Markets of United States (Econ. 32); Elective; Generation and Transmission of Power (M. E. 31), or Machinery and Manufacturing (M. E. 30); Public Finance (Econ. 5); Thesis.

COURSE IN BANKING

First Year

Same as in General Business Course.

Second Year

1. Business Writing (Rhet. 10); Elective; English Literature (Eng. 1); Military; Principles of Economics (Econ. 1); Science.
2. Business Writing (Rhet. 10); Logic (Phil. 1); Money and Banking (Econ. 3); Science; Statistics (Econ. 23, 24).

Third Year

1. Corporation Management and Finance (Econ. 20); Electives; Financial History of United States (Econ. 4); Practical Banking (Econ. 9).
2. Accounting; City Government (Govt. 3); Industrial Consolidations (Econ. 11); Public Finance (Econ. 5); The Money Market (Econ. 8).

Fourth Year

1. Commercial Law (Law B); Corporation Law (Law C); Domestic Commerce (Econ. 28); Electives; Science of Government (Govt. 1); Taxation (Econ. 6); Thesis.
2. Commercial Law (Law B); Corporation Law (Law C); Electives; Economic History of United States (Econ. 22); Science of Government (Govt. 1); Taxation (Econ. 6); Thesis.

LEGAL STUDY AND COLLEGE WORK.

By the proper selection of his studies it is possible for a prospective law student to take both his degree in arts and his degree in law in six years. A student who intends to

do this should first do all the work prescribed for candidates for the degree of A.B. (see pp. 79 ff.); he should then take studies sufficient to leave him not more than fifteen hours' credit to make in the senior year of his college course. The student during this year should enroll in the College of Law and take the first year's work there. Of this work ten hours, but no more, may be counted in the College of Literature and Arts. These ten hours must be in contracts and real property.

Students are not permitted to take this law work for credit toward the arts' degree until their senior year.

A fee of five dollars is charged for every law subject, except courses 22 and 24, page 261, taken by students who do not pay the regular law school fee.

SPECIAL STUDENTS OF ART AND DESIGN

No student of art, upon entering a course of professional study, is able to determine the line in which he will later specialize. Accordingly, students of art, upon entering the University, are required to follow a course introducing them to the principles and practice of the four closely allied branches of art—drawing, painting, modeling, and design—and are required to register for the following courses: First semester, course 1, 3, 16. Second semester, courses 2, section C, 3, 12, 16. (See pp. 201 ff.)

The above course may be followed by two years devoted to painting, modeling, or design, as the student may elect.

PREPARATION FOR TEACHING

Since the colleges and universities can only be supplied with students suitably prepared for their work through a system of secondary schools of high excellence, they have throughout the entire country turned their attention to the problem of furnishing the schools upon which they are dependent with properly qualified teachers. In this work, every department of the University which is represented in the secondary curriculum has its part. It is the belief of those

more directly in charge of the preparation of teachers at the University of Illinois that all students prepare for work in the high schools of the state should take at least two years' work (16-20 hours) in that subject, or those subjects, which are to be taught as specialties; and one year's work (8-10 hours) in those subjects which the person would be willing to teach if called upon to do so. It is also urged that considerable time be spent in the study of those subjects most closely allied. The subjects thus chosen would, of course, vary with different students. But in addition to such variables, it is believed that certain constants should form a part of the University program of every student preparing to teach.

Among these constants are: 1. Certain courses offered by the department of education. Of these, education 1, covering the general principles of education; and education 6, which is a critical study of high school organization and administration, are recommended. 2. An elementary course in psychology (psychology 1 or 2).

Other things being equal, preference will be given in the recommendation of candidates for teaching positions, to students who have followed more or less fully this outline.

DESCRIPTION OF DEPARTMENTS

ART AND DESIGN

All the courses of the department are open to special students of art. These students enjoy opportunities beyond the reach of students in the usual art school, since the work of other departments of the University is open to them without additional expense.

On account of the close connection of the department of art and design with the other departments of the University, students may specialize in the artistic sides of their chosen courses of study, and students who wish to become teachers of drawing or of manual training in the public schools may arrange courses to suit their individual needs.

COMMERCE

See Economics.

ECONOMICS

The department of economics includes general economics and economic history, sociology and statistics, finance, commerce, and industry. The courses are grouped to provide training for citizenship, graduate study and specialization in the lines mentioned above, and training for business life.

EDUCATION

The department of education aims to meet the needs of the prospective secondary school teacher, and of the prospective city superintendent. The normal schools of our state are well equipped for supplying the wants of the elementary schools, and it is intended that this work shall be supplemented, though not duplicated, here.

The department possesses a pedagogical library and museum, which contains various materials of interest and value to the student of the theory and art of teaching, and forms a working pedagogical laboratory.

ENGLISH LANGUAGE AND LITERATURE

The courses are designed to give a continuous view of the twofold subject from the earliest times to our own day. In junior and senior years courses are offered in both lines, so that students having had the fundamental work of the sophomore year, may, if they desire, specialize either in philology or in literature.

FRENCH

(See Romanic Languages, p. 92).

GERMAN

The instruction offered in this department includes elementary courses consisting of two years' work, and of advanced elective courses in the field of modern German

literature. Courses are also offered in Old and Middle High German.

GREEK

See courses, p. 249.

HISTORY

An effort is made, not merely to give students a general knowledge of historical facts, but also to give them some conception of the aims and methods of historical science, and of the materials with which it deals. To this end exercises in historical investigation, more or less elementary, form a prominent part of the work.

HOUSEHOLD SCIENCE

All the courses in household science are open as electives to students in the College of Literature and Arts. The purpose of the work in household science is not only to prepare teachers of the subject, but also to give every young woman some training in the proper conduct of household affairs. The esthetic and cultural side, as well as the practical, is strongly presented. All the work of the department counts towards the arts' degree. A full description is given on pages 256 ff.

ITALIAN

(See Romanic Languages, p. 92).

LATIN

See courses, p. 259.

LIBRARY SCIENCE

Students who may wish to do so may take the degree of bachelor of arts in library science by devoting their senior year to the first year of work in the Library School. Students who wish to graduate in this way must fulfill the literary requirements for graduation as set forth on page 79, and must in their senior year take library science 1, 2, 3, 4,

7 and 14. Library science 12 is open as an elective to all students.

MATHEMATICS

All the courses offered by the department of mathematics are open to the students of the College of Literature and Arts. These courses are so arranged that a student may take continuous work in the subject for from one to four years. Mathematics is included in the philosophical group.

Those students who take *mathematics* as their major work should take the courses in mathematics numbered 1, 3 (or 2, 4), 6, 8a, 8b, 10, 11, 15, 16, 17. They must also make sixteen hours' credit in either German or French. They are advised to take also physics 1, 3.

PHILOSOPHY

The work in this department is so arranged that students may take a continuous course for two years and a half. With the exception of the course in logic (Phil. 1), which is open to sophomores, none of the courses may be taken before the junior year.

While psychology is not made a requirement for any course, students will find psychology 1 or 2 a valuable preparation for their study of philosophy. The department for the present offers courses in anthropology.

PHYSICAL TRAINING

A full description of this department is given on pp. 324 ff.

POLITICAL SCIENCE

The work in political science is planned to give training for citizenship, to lay a foundation for the future study of law or for active political life, and to furnish advanced study for those who intend to teach the subject.

PSYCHOLOGY

Psychology is treated with a view to giving the student a connected idea of its development. Its experimental development and recent phases are given special attention.

RHETORIC AND ORATORY

See courses p. 300.

ROMANIC LANGUAGES AND LITERATURES

This department offers four years of instruction in French and one year each in Spanish and Italian.

SOCIOLOGY

See courses 15 and 17 under economics, p. 227. See for allied courses, anthropology, p. 194, philosophy, p. 286, and English 21, p. 238.

SPANISH

(See Romanic Languages above.)

COLLEGE OF ENGINEERING

The purpose of this college is a threefold one:

1. To train and prepare men for the efficient practice of the different professions of engineering and that of architecture, as well as to become managers of great business and industrial enterprises. Both professional and cultural studies are prescribed, since the successful engineer must possess broad views and be able to write and speak correct and vigorous English in order to present his views clearly and effectively. Training in proper methods for solving engineering problems is of much greater importance than the collection of stores and data, however valuable. But the graduate must be an efficient worker at the beginning of his career in some specialty of his chosen profession.

2. To provide instruction for graduates and to supervise their studies in selected fields, thus meeting a demand for highly specialized instruction and research.

3. To make original investigations and experiments in those lines of research which are of greatest interest and promise to the engineering and industrial enterprises of the citizens of this state.

EQUIPMENT

The special equipment of each department is described in connection with that department. The general equipment of the College consists of a good reference library of indexes, pocket-books, mathematical tables, and other works, together with a very valuable collection of apparatus for economizing time and ensuring accuracy of engineering calculations, and checking computations.

The principal instruments are Thomas's 10-place arithmometer, giving accurate results to 20 places; Thacher's computing scales; Grant's computing machines; other calculating machines, various types of slide rules, adders, etc.; Amsler's polar planimeter and Amsler's integrator; Coradi's linear and polar planimeters for very accurate measurement of irregular plane areas; Coradi's pantagraph for the automatic reduction of drawings and maps.

ENGINEERING EXPERIMENT STATION

The Engineering Experiment Station was established December 8, 1903, and it is the earliest experiment station connected with any college of engineering in the United States. Its purposes are the stimulation and elevation of engineering education, and the study of problems of especial importance to professional engineers, to men engaged in the manufacturing, railway, mining, industrial, and other interests intimately connected with the public welfare in this state. The equipment of machines and other apparatus is placed in the different laboratories of this College, and the investigations are made under the supervision of the professor in charge of each laboratory.

The Board of Direction consists of the Dean and all full professors in the College of Engineering.

Thus far the station has published one bulletin. It contains the results of many experiments on armored concrete beams, and is accepted by engineers throughout the world as an original contribution of great value. Other bulletins will report experiments in other fields, when these are completed.

DESCRIPTION OF DEPARTMENTS.

ARCHITECTURE

This department offers two courses of instruction and practice, preparing the graduate to enter the profession of architect, or that of architectural engineer.

The course of architecture prepares for the examination prescribed by the state license law for architects and for the general practice of architecture. The specialties of this course are construction, rendering drawings, design, architectural history, perspective, and practice in the arts most closely allied to architecture.

EQUIPMENT

A large collection of casts of ornament, models of structures, working drawings and blue prints, specimens of stones, bricks, tiles, terra cotta, fixtures and fittings, etc., is arranged in the architectural museum. More than 20,000 engravings, photographs, etc., mounted on cards, are classified for quick reference in the drawing rooms. An electric lantern is used in a specially fitted room, together with a collection of 6,200 lantern slides illustrating the history of architecture and of painting. A very fine architectural library is located in a large room in the department, and is open for use by students during the entire day. A vertical file case contains a large classified collection of plates from architectural journals and mounted photographs. A fine collection of stereoscopic views has recently been purchased.

COURSE OF STUDY

Required for Degree of B.S. in Architecture

First Year

FIRST SEMESTER		SECOND SEMESTER	
<i>Subject—</i>	S. H. ¹	<i>Subject—</i>	S. H. ¹
Engineering Drawing		Descriptive Geometry (G. E. D. 2)	4
(G. E. D. 1) ²	4	Analytical Geometry (Math. 6) ..	5
Trigonometry (Math. 4)	2	French 1, or German 3 or 5 or	
Advanced Algebra (Math. 2)	3	6, or English 27	4
French 1, or German 1 or 4, or		Orders of Architecture (Arch. 8)	3
English 1	4	Military Drill (Mil. 2)	1
Free Hand Drawing (Arch. 20) ..	3	Drill Regulations (Mil. 1)	1
Military Drill (Mil. 2)	1	Gymnasium Practice (Phys. Tr. 1)	½
Gymnasium Practice (Phys. Tr. 1)	½	Hygiene (Phys. Tr. 3)	½
Hygiene (Phys. Tr. 3)	½		
Total	18	Total	19

¹Semester hours. See p. 184.

²The numbers in parenthesis refer to the courses in the General Description of Courses, pp. 184 ff.

Second Year

FIRST SEMESTER		SECOND SEMESTER ¹	
<i>Subject—</i>	S. H. ¹	<i>Subject—</i>	S. H. ¹
Applied Mechanics (T. & A. M. 4)	4	Strength of Materials (T. & A. M. 5)	4
Wood Construction (Arch. 2)....	3	Masonry and Metal Construction (Arch. 3)	3
Architectural Perspective (Arch. 14)	2	Requirements of Buildings (Arch. 15)	3
Perspective Sketching (Arch. 35)	1	Physics Lectures (Phys. 2a)....	2
Physics Lectures (Phys. 2a)....	2	Physics Laboratory (Phys. 2b)..	2
Physics Laboratory (Phys. 2b)...	2	Rhetoric 1.....	3
Rhetoric 1.....	3	Monthly Problems (Arch. 9)....	1½
Monthly Problems (Arch. 9)....	½	Military Drill (Mil. 2).....	1
Military Drill (Mil. 2).....	1		
Total	18½	Total	18½

Third Year

FIRST SEMESTER		SECOND SEMESTER	
<i>Subject—</i>	S. H. ¹	<i>Subject—</i>	S. H. ¹
History of Architecture (Arch. 6)	4	History of Architecture (Arch. 6)	4
Architectural Seminary (Arch. 11)	1	Architectural Seminary (Arch. 11)	1
Sanitary Construction (Arch. 4).	1	Historic Ornament (Arch. 7).....	2
Architectural Composition (Arch. 18)	3	Graphic Statics and Roofs (Arch. 5)	3
Water Color Rendering (Arch. 32)	1	Architectural Designing (Arch. 17)	3
Rendering Ornament (Arch. 33)..	2	Working Drawings (Arch. 10)..	1
Economics 2.....	2	Residence Design (Arch. 16)....	2
Clay Modeling (Art and Design 8a).....	2	Monthly Problems (Arch. 9)....	½
Monthly Problems (Arch. 9)....	½		
Total	16½	Total	16½

Fourth Year

FIRST SEMESTER		SECOND SEMESTER	
<i>Subject—</i>	S. H. ¹	<i>Subject—</i>	S. H. ¹
Superintendence, Estimates, etc. (Arch. 12)	3	Design of Ornament (Arch. 25)..	3
Heating and Ventilation (Arch. 13)	4	Mural Decoration (Arch. 28)....	2
Renaissance Design (Arch. 22)..	3	Surveying (Civ. Eng'g 10).....	2
Medieval Design (Arch. 23)....	3	Electric Lighting (El. Eng'g 9)..	1
Mural Decoration (Arch. 28)....	2	Architectural Readings, French, German, or English (Arch. 31)	1
Architectural Readings, French, German, or English (Arch. 31)	1	Monthly Problems (Arch. 9)....	½
Monthly Problems (Arch. 9)....	½	Thesis (Arch. 30).....	6
Thesis (Arch. 30).....			
Total	16½	Total	15½

ARCHITECTURAL ENGINEERING

This course of study prepares students for professional practice as architectural engineers, structural designers and computers, as well as superintendents of construction. It is

¹Semester hours. See p. 184.

intended for students who prefer the structural and mathematical side of the profession to its artistic side, and who desire to pursue the full engineering course in mathematics and to acquire a thorough knowledge of the iron and steel construction now employed in buildings. It differs from the architectural course principally in the addition of a second year of mathematics, of a year of study in bridge analysis and design, and in devoting relatively less time to architectural drawing and design.

COURSE OF STUDY

Required for the Degree of B.S. in Architectural Engineering

First Year

FIRST SEMESTER		SECOND SEMESTER	
Subject—	S. H. ¹	Subject—	S. H. ¹
Engineering Drawing (G. E. D. 1) ²	4	Descriptive Geometry (G. E. D. 2) ..	4
Trigonometry (Math. 4)	2	Analytical Geometry (Math. 6) ..	5
Advanced Algebra (Math. 2)	3	French 1, or German 3 or 5 or 6, or English 27	4
French 1, or German 1 or 4, or English 1	4	Shop Practice (M. E. 1)	3
Shop Practice ³ (M. E. 2)	3	Military Drill (Mil. 2)	1
Military Drill (Mil. 2)	1	Drill Regulations (Mil. 1)	1
Gymnasium Practice (Phys. Tr. 1) ..	½	Gymnasium Practice (Phys. Tr. 1)	½
Hygiene (Phys. Tr. 3)	½	Hygiene (Phys. Tr. 3)	½
Total	18	Total	19

Second Year

FIRST SEMESTER		SECOND SEMESTER	
Subject—	S. H. ¹	Subject—	S. H. ¹
Differential Calculus (Math. 7) ..	5	Integral Calculus (Math. 9)	3
Wood Construction (Arch. 2) ..	3	Masonry and Metal Construction (Arch. 3)	3
Architectural Perspective (Arch. 14)	2	Requirements of Buildings (Arch. 15)	3
Physics Lectures (Phys. 1, 3)	3	Physics Lectures (Phys.)	2
Physics Laboratory (Phys. 1, 3) ..	2	Physics Laboratory (Phys.)	2
Rhetoric 1	3	Analytical Mechanics (T. & A. M. 7)	3
Military Drill (Mil. 2)	1	Rhetoric 1	3
Total	19	Military Drill (Mil. 2)	1
		Total	20

¹Semester hours. See p. 184.

²The numbers in parentheses refer to the courses in the General Description of Courses, pp. 184 ff.

³Free Hand Drawing (Arch. 20), first semester, and Orders of Architecture (Arch. 8) second semester.

Third Year

FIRST SEMESTER		SECOND SEMESTER	
<i>Subject—</i>	S. H. ¹	<i>Subject—</i>	S. H. ¹
Analytical Mechanics (T. & A. M. 8)	2½	Hydraulics (T. & A. M. 10).....	3
Resistance of Materials (T. & A. M. 9)	3½	Graphic Statics and Roofs (Arch. 5)	3
Engineering Materials (T. & A. M. 6)	1	Working Drawings (Arch. 10)...	1
History of Architecture (Arch. 6)	4	History of Architecture (Arch. 6)	4
Architectural Seminary (Arch. 11)	1	Steam Engines and Boilers (M. E. 11)	3
Sanitary Construction (Arch. 4).	1	Engineering Chemistry (Chem. 16)	3
Chemistry I.....	4	Total	17
Total	17		

Fourth Year

FIRST SEMESTER		SECOND SEMESTER	
<i>Subject—</i>	S. H. ¹	<i>Subject—</i>	S. H. ¹
Architectural Engineering (Arch. 19)	3	Architectural Engineering (Arch. 19)	3
Bridge Analysis (C. E. 12).....	2	Bridge Design (C. E. 14a).....	3
Bridge Details (C. E. 13).....	3	Surveying (C. E. 10).....	2
Superintendence, Estimates, and Specifications (Arch. 12).....	3	Electric Lighting (E. E. 9).....	1
Heating and Ventilation (Arch. 13)	4	Architectural Engineering Semin- ary (Arch. 34).....	2
Architectural Readings (Arch. 31)	1	Architectural Readings (Arch. 31)	1
Thesis (Arch. 30).....	—	Thesis (Arch. 30).....	4
Total	16	Total	16

CIVIL ENGINEERING

The design in this department is to furnish a course of theoretical instruction, accompanied and illustrated by a large amount of practice. While the instruction aims to be practical by giving the student information and practice directly applicable in his future professional work, the prime object is the development of the mental faculties. The power to acquire information and ability to use it are held to be of far greater value than any amount of so-called practical knowledge.

EQUIPMENT

This department has an extensive equipment of compasses, engineers' transits, solar transits, levels,—ordinary and precise,—plane tables, sextants, chronometers, barometers, etc. The department is provided with a collection of structural shapes and with full-sized joints of an actual

¹Semester hours, See p. 184.

railroad bridge, sections of columns, eye-bars, etc., and a collection of lithographs, photographs, and blue-prints of bridges and buildings.

The *cement laboratory* occupies rooms in the Law Building, and is provided with slate tables, testing machines, molding machines, sieves, etc., and sample barrels of hydraulic cement, varieties of sand, and other necessary materials.

COURSE OF STUDY

Required for the Degree of B.S. in Civil Engineering

First Year

FIRST SEMESTER		SECOND SEMESTER	
<i>Subject—</i>	S. H. ¹	<i>Subject—</i>	S. H. ¹
General Engineering Drawing (G. E. D. 1) ²	4	Descriptive Geometry (G. E. D. 2) ..	4
Trigonometry (Math. 4)	2	Analytical Geometry (Math. 6) ..	5
Advanced Algebra (Math. 2)	3	French 1, or German 3 or 5 or 6, or English 27	4
French 1, or German 1 or 4, or English 1	4	Shop Practice (M. E. 1)	3
Shop Practice (M. E. 1)	3	Military Drill (Mil. 2)	1
Military Drill (Mil. 2)	1	Drill Regulations (Mil. 1)	1
Gymnasium Practice (Phys. Tr. 1) ..	1½	Gymnasium Practice (Phys. Tr. 1) ..	1½
Hygiene (Phys. Tr. 3)	1½	Hygiene (Phys. Tr. 3)	1½
Total	18	Total	19

Second Year

FIRST SEMESTER		SECOND SEMESTER	
<i>Subject—</i>	S. H. ¹	<i>Subject—</i>	S. H. ¹
Surveying (C. E. 21)	5	Topographical Surveying (C. E. 22)	4
Differential Calculus (Math. 7) ..	5	Railroad Curves (C. E. 23)	1
Physics Lectures (Phys. 1)	3	Integral Calculus (Math. 9)	3
Physics Laboratory (Phys. 3)	2	Physics Lectures (Phys. 1)	2
Rhetoric 1	3	Physics Laboratory (Phys. 3)	2
Military Drill (Mil. 2)	1	Rhetoric 1	3
Total	19	Analytical Mechanics (T. & A. M. 7)	3
		Military Drill (Mil. 2)	1
		Total	19

¹Semester hours. See p. 184.

²The numbers in parentheses refer to courses in the General Description of Courses, pp. 184 ff.

Third Year

FIRST SEMESTER		SECOND SEMESTER	
<i>Subject—</i>	S. II. ¹	<i>Subject—</i>	S. II. ¹
Railroad Location, Construction and Maintenance (C. E. 4).....	5	Railroad Structures (C. E. 19)....	1
Analytical Mechanics (T. & A. M. 8).....	2½	Graphic Statics (C. E. 20).....	2
Resistance of Materials (T. & A. M. 9).....	3½	Hydraulics (T. & A. M. 10).....	3
Chemistry ¹²	4	Road Engineering (C. E. 1)....	2
Engineering Materials (T. & A. M. 6)	1	Astronomy 3 and 6, or Geology 13	5
		Steam Engines and Boilers (M. E. 11)	3
Total	16	Total	16

Fourth Year

FIRST SEMESTER		SECOND SEMESTER	
<i>Subject—</i>	S. H. ¹	<i>Subject—</i>	S. H. ¹
Masonry Construction (C. E. 5)..<	5	Bridge Design (C. E. 14).....	5
Bridge Analysis (C. E. 12).....	2	Engineering Contracts and Specifications (C. E. 16).....	2
Bridge Details (C. E. 13).....	3	Seminary (C. E. 25).....	1
Metal Structures (C. E. 24).....	1	Tunneling (C. E. 18).....	1
Water Supply Eng'g (M.&S.E.2)	4	Sewerage (M. & S. E. 3).....	3
Thesis (C. E. 30).....	1	Economics ²	2
Total	16	Thesis (C. E. 30).....	2
		Total	16

ELECTRICAL ENGINEERING

This is a course in theoretical and applied electricity. The first two years of work are substantially the same as in the other engineering courses, including practical work in drafting room and shop, as well as instruction in the fundamental principles of mathematics and physics. The last two years, while involving more advanced theoretical study, include practice in the design and operation of electrical apparatus, and the study of commercial complications. Courses in civil and mechanical engineering and in economics are also included.

EQUIPMENT

The 200 kilowatt power plant of the University located in the Electrical Laboratory Building is an example of recent

¹Semester hours, See p. 184.

²Students who have offered Chemistry for admission must take Electrical Engineering Laboratory (Electrical Eng'g 2 and 26), instead of Chemistry 1; and students who have received advanced credit for Chemistry 1 may take the above subjects in place of Chemistry.

construction, and affords opportunity for tests. The special direct and alternating current generators of the department furnish the power required to operate the various experimental apparatus and for charging the new storage battery. The various types of generators, motors, converters and transformers are well represented, often in duplicate. Modern measuring instruments of unusual range are amply provided. Electric lamps of all recent types may be tested by the photometers, and telegraph and telephone instruments illustrate modern practice. Elaborate switchboards designed for rapid experimental work distribute current wherever required. Special railway test apparatus is now available. Facilities for research work have been materially increased.

COURSE OF STUDY

Required for the Degree of B.S. in Electrical Engineering

First Year

FIRST SEMESTER		SECOND SEMESTER	
<i>Subject—</i>	S. H. ¹	<i>Subject—</i>	S. H. ¹
Engineering Drawing		Descriptive Geometry (G. E. D. 2)	4
(G. E. D. 1) ²	4	Analytical Geometry (Math. 6) ..	5
Trigonometry (Math. 2)	2	French 1, or German 3 or 5 or	
Advanced Algebra (Math. 4)	3	6, or English 27	4
French 1, or German 1 or 4, or		Shop Practice (M. E. 1)	3
English 1	4	Military Drill (Mil. 2)	1
Shop Practice (M. E. 1)	3	Drill Regulations (Mil. 1)	1
Military Drill (Mil. 2)	1	Gymnasium Practice (Phys. Tr. 1)	½
Gymnasium Practice		Hygiene (Phys. Tr. 3)	½
(Phys. Tr. 1)	½		
Hygiene (Phys. Tr. 3)	½	Total	19
Total	18		

Second Year

FIRST SEMESTER		SECOND SEMESTER	
<i>Subject—</i>	S. H. ¹	<i>Subject—</i>	S. H. ¹
Differential Calculus (Math. 7) ..	5	Integral Calculus (Math. 9)	3
Machine Shop (M. E. 2)	2½	Machine Shop (M. E. 2)	2½
Machine Design (M. E. 4)	2½	Machine Design (M. E. 4)	2½
Physics Lectures (Phys. 1)	3	Physics Lectures (Phys. 1)	2
Physics Laboratory (Phys. 3)	2	Physics Laboratory (Phys. 3)	2
Rhetoric 1	3	Rhetoric 1	3
Military Drill (Mil. 2)	1	Analytical Mechanics	
Total	19	(T. & A. M. 7)	3
		Military Drill (Mil. 2)	1
		Total	19

¹Semester hours, See p. 184.

²The numbers in parentheses refer to courses in the General Description of Courses, pp. 184 ff.

Third Year

FIRST SEMESTER		SECOND SEMESTER	
Subject—	S. H. ¹	Subject—	S. H. ¹
Dynamo-Elec. Machinery (E. E. 16).....	3	Dynamo-Elec. Machinery (E. E. 16).....	3
Elec. and Mag. Measurements (Phys. 4).....	4	Elec. Eng. Laboratory (E. E. 22).....	2
Analytical Mechanics (T. & A. M. 8).....	2½	Hydraulics (T. & A. M. 10).....	3
Resistance of Materials (T. & A. M. 9).....	3½	Elec. and Mag. Measurements (Phys. 4).....	4
Engineering Materials (T. & A. M. 6).....	1	Surveying (C. E. 10).....	2
Chemistry 1 ²	4	Steam Engineering (M. E. 11)....	3
Total	18	Total	17

Fourth Year

FIRST SEMESTER		SECOND SEMESTER	
Subject—	S. H. ¹	Subject—	S. H. ¹
Alternating Currents (E. E. 5)...	3	Adv. Alternating Currents (E. E. 14)	2
Telegraphy and Telephony (E. E. 4)	2	Power Plants (E. E. 11).....	1
Electro-Chemistry (E. E. 12).....	2	Traction (E. E. 17).....	2
Electrical Distribution (E. E. 15).....	3	Elec. Eng. Laboratory (E. E. 24).....	2
Elec. Eng. Laboratory (E. E. 23).....	1½	Electrical Design (E. E. 33).....	1
Elec. Eng. Laboratory (E. E. 27).....	1½	Seminary (E. E. 13).....	1
Electrical Design (E. E. 32).....	2	Estimates, Specifications, etc. (M. E. 10)	1
Seminary (E. E. 13)	1	Mech. Eng. Laboratory (M. E. 13)	2
Economics 2.....	2	Economics 16a.....	2
Total	18	Thesis (E. E. 35).....	3
		Total	17

MECHANICAL ENGINEERING

It is the primary object of the Department of Mechanical Engineering to give its students a thorough training in the theoretical principles underlying the construction and operation of machinery and the generation and transmission of power. The theoretical instruction is supplemented by shop and laboratory work of a practical character.

EQUIPMENT

The *drawing rooms* are equipped with card indexes, reference books, catalogs, gear charts, etc. In the cabinet rooms are kinematic models and sectioned steam specialties.

The *Steam Engineering Laboratory* contains steam

¹Semester hours, See p. 184.
²Students who have offered the equivalent of Chemical 1 for admission must arrange for a substitute.

engines of various types, several gas engines, air compressors, a hot-air engine, a large volume fan, and a complete outfit of instruments used by the mechanical engineer for testing purposes. In the central heating station are several types of boilers equipped with different kinds of automatic stokers; there are also various steam and power pumps.

The shops of the College are in charge of this department; they consist of a wood shop, foundry, forge shop, and machine shop.

The shops are large, well lighted and attractive; they are all equipped with modern tools and furnish abundant facilities for giving the student the necessary practice in this line of work.

By special arrangement with the management of the Peoria and Eastern division of the C. C. C. & St. L. Ry., the power plant and shops located at Urbana have been opened to the Mechanical Engineering Department for visits of inspection and for experimental investigations. Ample opportunity is thus furnished for the study of machinery and processes in a shop operated under commercial conditions.

COURSE OF STUDY

Required for the Degree of B.S. in Mechanical Engineering

First Year

FIRST SEMESTER		SECOND SEMESTER	
Subject—	S. H. ¹	Subject—	S. H. ¹
General Engineering Drawing (G. E. D. 1) ²	4	Descriptive Geometry (G. E. D. 2) ..	4
Trigonometry (Math. 4)	2	Analytical Geometry (Math. 6) ..	5
Advanced Algebra (Math. 2)	3	French 1, or German 3 or 5 or 6, or English 27	4
French 1, or German 1 or 4, or English 1	4	Shop Practice (M. E. 1)	3
Shop Practice (M. E. 1)	3	Military Drill (Mil. 2)	1
Military Drill (Mil. 2)	1	Drill Regulations (Mil. 1)	1
Gymnasium Practice (Phys. Tr. 1)	$\frac{1}{2}$	Gymnasium Practice (Phys. Tr. 1) ..	$\frac{1}{2}$
Hygiene (Phys. Tr. 3)	$\frac{1}{2}$	Hygiene (Phys. Tr. 3)	$\frac{1}{2}$
Total	18	Total	19

¹Semester hours, See p. 184.

²The numbers in parentheses refer to the courses of the General Description of Courses, pp. 184 ff.

Second Year

FIRST SEMESTER		SECOND SEMESTER	
<i>Subject—</i>	S. H. ¹	<i>Subject—</i>	S. H. ¹
Differential Calculus (Math. 7) ..	5	Integral Calculus (Math. 9)	3
Machine Shop (M. E. 2)	2½	Machine Shop (M. E. 2)	2½
Machine Design (M. E. 4)	2½	Machine Design (M. E. 4)	2½
Physics Lectures (Phys. 1)	3	Physics Lectures (Phys. 1)	2
Physics Laboratory (Phys. 3)	2	Physics Laboratory (Phys. 3)	2
Rhetoric 1	3	Rhetoric 1	3
Military Drill (Mil. 2)	1	Analytical Mechanics (T. & A. M. 7)	3
Total	19	Military Drill (Mil. 2)	1
		Total	19

Third Year

FIRST SEMESTER		SECOND SEMESTER	
<i>Subject—</i>	S. H. ¹	<i>Subject—</i>	S. H. ¹
Mechanism (M. E. 5)	3	Steam Engineering (M. E. 23) ...	4
Graphic Statics of Mechanism (M. E. 18)	2	Seminary (M. E. 29)	1
Seminary (M. E. 29)	1	Power Measurement (M. E. 3) ...	2
Analytical Mechanics (T. & A. M. 8)	2½	Advanced Kinematics (M. E. 25) or Engineering Chemistry (Chem. 16)	3
Resistance of Materials (T. & A. M. 9)	3½	Surveying (C. E. 10)	2
Engineering Materials (T. & A. M. 6)	1	Electrical Engineering (E. E. 1) ..	2
Chemistry 1 ²	4	Hydraulics (T. & A. M. 10)	3
Total	17	Total	17

Fourth Year

FIRST SEMESTER		SECOND SEMESTER	
<i>Subject—</i>	S. H. ¹	<i>Subject—</i>	S. H. ¹
Thermodynamics (M. E. 7)	3	Heat Engines (M. E. 6)	2
Mechanics of Machinery (M. E. 8) ..	2	Mechanics of Machinery (M. E. 8) ..	3
Advanced Machine Design (M. E. 9)	3	Advanced Machine Design (M. E. 9)	3
Advanced Mechanical Laboratory (M. E. 12)	3	Advanced Mechanical Laboratory (M. E. 12)	1
Seminary (M. E. 19)	1	Seminary (M. E. 19)	1
Electrical Engineering Laboratory (E. E. 21)	2	Estimates (M. E. 10)	1
Economics 2	2	Economics 16a	2
Total	16	Thesis (M. E. 33)	3
		Total	16

RAILWAY ENGINEERING

The railroad interests of the country have become so important as to demand separate recognition in the courses of those educational institutions which offer instruction in engineering.

¹Semester hours. See p. 184.

²Students who have offered the equivalent of Chemical 1 for admission must arrange for substitute.

Wishing to meet the demand for specialization in this important work the University has established an undergraduate course leading to the degree of B.S. in *Railway Engineering* and has also provided for graduate instruction and investigation leading to a second degree.

The course is devoted to the problems of motive power and machinery, including construction, design, and operation of locomotives and rolling stock, and tests of fuel, water supply, materials and supplies.

The department of civil engineering furnishes special instruction relating to construction and maintenance of way.

EQUIPMENT

The shops and laboratories of the departments of mechanical and electrical engineering, applied mechanics, and chemistry furnish abundant laboratory facilities for work along these special lines.

The department possesses a considerable amount of class room and laboratory material, such as photographs, blue prints, and samples of manufactured specialties of value to the students of this work.

This department now owns, with the Illinois Central R. R., a fully equipped railway test car, No. 17. This car has been designed for locomotive and railway tests, and is used for no other purpose. It has been equipped with special reference to the following service:

1. Locomotive road tests for economy.
2. Locomotive capacity tests and measurements of train resistance.
3. Air brake service inspection.
4. Stationary plant tests at railway shops and water stations.

The department owns a continuous steam engine indicator, apparatus for determining the effect of scale deposits on the transfer of heat through the tubes, as well as considerable apparatus designed and built for various tests of locomotives in actual service.

The New York Air Brake Company has recently presented to the department a complete equipment of automatic air-brakes for engine, tender, and five cars.

The railway shops of the P. & E. Div. of the C. C. C. & St. L. Ry. at Urbana furnish exceptional opportunities for inspection of construction and repair work, and the assured aid that this department will receive from the management of these shops will be of great value to the student.

COURSE OF STUDY

Required for the Degree of B.S. in Railway Engineering

First Year

FIRST SEMESTER		SECOND SEMESTER	
<i>Subject—</i>	S. H. ¹	<i>Subject—</i>	S. H. ¹
Engineering Drawing		Descriptive Geometry (G. E. D. 2)	4
(G. E. D. 1) ²	4	Analytical Geometry (Math. 6) ..	5
Trigonometry (Math. 2)	2	French 1, or German 3 or 5 or	
Advanced Algebra (Math. 4)	3	6, or English 1	4
French 1, or German 1 or 4, or		Shop Practice (M. E. 1)	3
English 1	4	Military Drill (Mil. 2)	1
Shop Practice (M. E. 1)	3	Drill Regulations (Mil. 1)	1
Military Drill (Mil. 2)	1	Gymnasium Practice (Phys. Tr. 1)	½
Gymnasium Practice		Hygiene (Phys. Tr. 3)	½
(Phys. Tr. 1)	½	Total	19
Hygiene (Phys. Tr. 3)	½		
Total	18		

Second Year

FIRST SEMESTER		SECOND SEMESTER	
<i>Subject—</i>	S. H. ¹	<i>Subject—</i>	S. H. ¹
Machine Shop (M. E. 2)	2½	Machine Shop (M. E. 2)	2½
Machine Design (M. E. 4)	2½	Machine Design (M. E. 4)	2½
Differential Calculus (Math. 7) ..	5	Integral Calculus (Math. 9)	3
Physics Lectures (Phys. 1)	3	Physics Lectures (Phys. 1)	2
Physics Laboratory (Phys. 3)	2	Physics Laboratory (Phys. 3)	2
Rhetoric 1	3	Rhetoric 1	3
Military Drill (Mil. 2)	1	Analytical Mechanics	
Total	19	(T. & A. M. 7)	3
		Military Drill (Mil. 2)	1
		Total	19

¹Semester hours. See p. 184.

²The numbers in parentheses refer to courses in the General Description of Courses, pp. 184 ff.

Third Year

FIRST SEMESTER		SECOND SEMESTER	
<i>Subject—</i>	S. H. ¹	<i>Subject—</i>	S. H. ¹
Mechanism (M. E. 5).....	3	Steam Engineering (M. E. 23)....	4
Graphic Statics (M. E. 18).....	2	Power Measurement (M. E. 3)...	2
Seminary (M. E. 29).....	1	Seminary (M. E. 29).....	1
Resistance of Materials (T. & A. M. 8)	2½	Advanced Kinematics (M. E. 25) or Engineering Chemistry (Chem. 16).....	3
Resistance of Materials (T. & A. M. 9)	3½	Surveying (C. E. 10).....	2
Engineering Materials (T. & A. M. 6)	1	Electrical Engineering (E. E. 1). 2	
Chemistry 1 ²	4	Hydraulics (T. & A. M. 10).....	3
Total	17	Total	17

Fourth Year

FIRST SEMESTER		SECOND SEMESTER	
<i>Subject—</i>	S. H. ¹	<i>Subject—</i>	S. H. ¹
Thermodynamics (M. E. 7).....	3	Mechanics of Machinery (M. E. 8) 3	
Locomotive Engines (Ry. E. 1)..	2	Compressed Air in Railway Service (Ry. E. 5).....	1
Locomotive Engine Design (Ry. E. 2)	3	Railway Estimates (Ry. E. 6)....	1
Shop Systems (Ry. E. 3).....	1	Advanced Designing (Ry. E. 7)..	3
Locomotive Road Tests (Ry. E. 4) 3		Dynamometer Car Tests (Ry. E. 8) 1	
Economics 2.....	2	Economics 16a.....	2
Seminary (M. E. 19).....	1	Seminary (M. E. 19).....	1
Total	16	Thesis (M. E. 33).....	3
		Total	15

MECHANICS, THEORETICAL AND APPLIED

The courses in theoretical and applied mechanics are designed to meet the needs of students of the College of Engineering.

The laboratory of applied mechanics, comprising the materials laboratory and hydraulic laboratory, occupies a new building, and its equipment is extensive and well suited for instruction and investigation. The materials laboratory is equipped with testing machines for tension, compression, flexure, and torsion, and for testing paving brick and building materials. A testing machine having a capacity of 600,000 lb. and arranged to take large and bulky pieces in tension, compression and flexure is a recent acquisition. The hydraulic laboratory has a standpipe, pumps, water motors and turbine, measuring pits, Venturi meters, weir conduits,

¹Semester hours. See p. 184.

²Students who have offered the equivalent of Chemical 1 for admission, must arrange for a substitute.

meter rating conduit, orifice boxes, weir boxes, and apparatus for experimental work on flow of water through pipes, hose, and nozzles. The University water-works furnishes an abundant supply of water at pressures up to 100 lbs. per sq. in.

MUNICIPAL AND SANITARY ENGINEERING

This course is designed for students desiring to make a specialty of city engineering work. It prepares for the varied duties of engineer of the department of public works of cities and includes instruction in modern methods of sanitation of cities.

INSTRUCTION

The methods of training are intended to develop power to take up and solve new problems connected with municipal public works, as well as to design and to superintend the ordinary constructions. Surveying, structural materials, and structural design are taught as in the civil engineering course. Chemistry, botany, and bacteriology, so far as necessary to a comprehension of the questions involved in water supply and sewage disposal, are given.

COURSE OF STUDY

Required for the Degree of B.S. in Municipal and Sanitary Engineering

First Year

FIRST SEMESTER		SECOND SEMESTER	
<i>Subject—</i>	S. H. ¹	<i>Subject—</i>	S. H. ¹
General Engineering Drawing		Descriptive Geometry (G. E. D. 2)	4
(G. E. D. 1) ²	4	Analytical Geometry (Math. 6) ..	5
Trigonometry (Math. 4)	2	French 1, or German 3 or 5 or	
Advanced Algebra (Math. 2)	3	6, or English 27, or Rhetoric 11	4
French 1, or German 1 or 4, or		Shop Practice (M. E. 1)	3
English 1	4	Military Drill (Mil. 2)	1
Shop Practice (M. E. 1)	3	Drill Regulations (Mil. 1)	1
Military Drill (Mil. 2)	1	Gymnasium Practice (Phys. Tr. 1)	½
Gymnasium Practice		Hygiene (Phys. Tr. 3)	½
(Phys. Tr. 1)	½		
Hygiene (Phys. Tr. 3)	½	Total	19
Total	18		

¹Semester hours. See p. 184.

²The numbers in parentheses refer to the courses in the General Description of Courses, pp. 184 ff.

Second Year

FIRST SEMESTER		SECOND SEMESTER	
<i>Subject—</i>	S. H. ¹	<i>Subject—</i>	S. H. ¹
Surveying (C. E. 21).....	5	Topographical Surveying (C. E. 22)	4
Differential Calculus (Math. 7) ..	5	Railroad Curves (C. E. 23).....	1
Physics Lectures (Phys. 1).....	3	Integral Calculus (Math. 9).....	3
Physics Laboratory (Phys. 3)....	2	Physics Lectures (Phys. 1).....	2
Rhetoric 1.....	3	Physics Laboratory (Phys. 3)....	2
Military Drill (Mil. 2).....	1	Rhetoric 1.....	3
		Analytical Mechanics (T. & A. M. 7)	3
Total	19	Military Drill (Mil. 2).....	1
		Total	19

Third Year

FIRST SEMESTER		SECOND SEMESTER	
<i>Subject—</i>	S. H. ¹	<i>Subject—</i>	S. H. ¹
Railroad Location and Construc- tion (C. E. 4a).....	3	Hydraulics (T. & A. M. 10).....	3
Analytical Mechanics (T. & A. M. 8)	2½	Road Engineering (C. E. 1).....	2
Resistance of Materials (T. & A. M. 9)	3½	Graphic Statics (C. E. 20).....	2
Engineering Materials (T. & A. M. 6)	1	Steam Engines and Boilers (M. E. 11)	3
Bacteriology (M. & S.E. 5a).....	2	Chemistry 3b, 10.....	5
Chemistry 1.....	4	Electrical Engineering 1.....	2
Total	16	Total	17

Fourth Year

FIRST SEMESTER		SECOND SEMESTER	
<i>Subject—</i>	S. H. ¹	<i>Subject—</i>	S. H. ¹
Water Supply Engineering (M. & S. E. 2)	4	Sewerage (M. & S. E. 3).....	3
Water Purification, Sewage Dis- posal, and General Sanitation (M. & S. E. 6a)	2	Water Purification, Sewage Dis- posal, and General Sanitation (M. & S. E. 6b)	3
Masonry Construction (C. E. 5) ..	5	Bridge Design (C. E. 14a).....	3
Bridge Analysis (C. E. 12).....	2	Engineering Contracts and Speci- fications (C. E. 16).....	2
Bridge Details (C. E. 13).....	3	Mechanical Engineering Labora- tory (M. E. 13).....	2
Electrical Engineering 28.....	1	Economics 2.....	2
		Thesis	2
Total	17		
		Total	17

PHYSICS

LABORATORY AND EQUIPMENT

The physics department occupies, in Engineering Hall, a lecture room, with seats for 230 students; four adjoining rooms, for lecture apparatus and preparation; a general laboratory room 60 feet square, for first year experimental

¹Semester hours. See p. 184.

work; an adjoining apparatus room; six small laboratories on the first floor with masonry piers, a constant temperature room, a battery room, a work shop, and three offices for instructors. These rooms are supplied with gas, water, compressed air, vacuum pipes, polyphase, alternating and direct electric currents, and other facilities for instruction and investigation in physics. The laboratory contains a large collection of standard electrical and magnetic measurement apparatus from the best makers, together with various pieces and devices designed and constructed in the department. In optics there are spectrometers, Rowland diffraction gratings (plane and concave), a Fresnel optical bench, a complete photometer bench in a well-equipped dark room, a spectrum photometer, polarization apparatus, etc. The collection also includes apparatus for measurements of precision, such as balances, dividing engines, cathetometer, chronograph, Kater's pendulum, thermometers, etc. The work shop of the department is equipped with two power lathes, milling machine and a good collection of tools. The services of a mechanic give the department facilities for making apparatus from original designs, both for instruction and investigation.

COLLEGE OF SCIENCE

The College of Science includes the various departments of natural, physical, and mathematical science. It provides a liberal education with science as a leading element, and it affords an opportunity for specialization in the mathematical, physical, chemical, and biological sciences, and in astronomy, geology, and household science.

DEGREES

The usual degree given for work in this College is that of bachelor of arts, but the degree of bachelor of science may be given on recommendation of the head of the department in which the principal major work has been done, and approval of the Faculty of the College

REQUIREMENTS FOR GRADUATION

The offerings of this College are combined in various courses, making somewhat different graduation requirements. A student may graduate from a general course in science, with a wide latitude in choice of electives, or from one of the more special courses provided in chemistry, in chemical engineering, in household science, in mathematics, in physics, and in the studies preliminary to medicine.

The subjects offered in each course are divided into three groups; prescribed, major electives, and general electives. The prescribed subjects are required of all students unconditionally. The major electives form a considerable list of courses in the subjects most characteristic of the work of the College, from which the student must choose a minimum

number of hours' work. The general electives comprise all other courses offered in the University which the students of this College are qualified to take.

GENERAL CLASSIFICATION OF SUBJECTS

General Prescribed List

Chemistry 1,¹ 3b, 4; 10 hours; or 1, 2, 3a, 5a, 9, 9a, or 9c, 31; 28 hours.

German 1, 3, 4, 5 or 6, or French 1, 2; 16 hours².

Mathematics 3 or 4; 2 or 3 hours.

Military Science 1, 2; 5 hours.

Physical Training—

Men, 1, 3; 2 hours.

Women, 7, 9; 3 hours.

Rhetoric 1; 6 hours.

Major Electives

Astronomy 3, 6, 7, 9, 10, 14, 15.

Botany 1 to 5, 7, 9, 10.

Chemistry³ 2, 3, 5 to 15, 17 to 19, 21, 23 to 36, 41, 42, 61, 65, 69, 90, 91.

Entomology 2, 3, 5, 6.

Geology 1, 2, 4 to 7, 9.

Household Science 1 to 5.

Mathematics 1 or 2, 3 or 4, 6, 8a, 8b, 10 to 26.

Physics 1, 3 to 10.

Physical Geography (Geology 8, 10).

Physiology 1 to 3, 5.

Psychology 1 to 8.

Zoology⁴ 1 to 3, 8, 12 to 17.

¹Students who offer the equivalent of chemistry 1 for admission must arrange for a substitute.

²Students having entrance credit for two years of high school German may satisfy the above requirement with eight semester hours each of German and French. Those not receiving two years credit in foreign language must take one year's University work in English or economics. Botany 13 and Zoology 14 (German readings) will be accepted instead of German 6.

³Courses in Chemistry and Mathematics taken to meet the requirement of the prescribed list may not be counted as major elective.

⁴Zoology 10 may be credited as a major elective if followed by five hours of major work in zoology or entomology.

GENERAL ELECTIVES

The subjects which may be taken as general electives include not only the branches taught by the departments of this college, but those offered by the other colleges and schools of the University. Courses in history, economics, languages, literature, and philosophy, taught in the College of Literature and Arts; those in agronomy, animal husbandry and horticulture taught in the College of Agriculture; and certain courses taught in the College of Engineering and in the Library School afford abundant material from which elections may be made, varying in amount according to the course pursued. In general science students may select approximately one-third of their work from the subjects taught in other colleges of the University.

GENERAL SCIENCE

To graduate from a general course in science, the following requirements must be fulfilled:

1. The student must complete the work indicated in the foregoing general prescribed list.
2. He must obtain 30 hours' credit in some one of the subjects in the foregoing list of major electives, or 40 hours in more than one.
3. He must obtain at least 5 hours' credit in physics or geology, and 5 hours in botany or zoology.
4. He must secure enough additional credits from the list of general electives to complete the graduation requirement of 130 hours.

A thesis course may be taken in any department (subject to the approval of the head thereof) in which the student has done 20 hours of major work preceding his senior year. Students desiring to take a thesis course in geology or mineralogy may add to their credits in those subjects the credits received for chemistry also; and students in physiology may add to their credits in that subject those in zoology and bacteriology. Only students graduating with a thesis

will, as a rule, be selected for fellowships, scholarships, and other similar university honors.

PROSPECTUS OF COURSE OF INSTRUCTION

In the following list, the prescribed subjects, the major electives, and the general electives open to beginners are indicated for the freshman year. For the remaining years only the prescribed subjects are given. *In making up the study list for any semester students should take the subjects italicised, and select from the remainder enough to make the requisite amount of work.*

First Year

First Semester—

(Prescribed subjects) *Art and Design* 1; *Chemistry* 1; *Mathematics* 3 or 4; *Military* 2; *Physical Training* 1, 3 or 7, 9.

(Major Electives) Botany 2, 11; Household Science 2; Mathematics 1 or 2; Zoölogy 10, 1a or 1b.

(General Electives) Astronomy 1; Entomology 1, 4; Geology 3; Physical Geography (Geology 8); Economics 7, 26; English 1; French 1; German 1; History 1; Latin 1 (for those offering 9 credits for entrance); Library Science 12; Rhetoric 1; Horticulture 1; Animal Husbandry 21.

Second Semester—

(Prescribed Subjects) *Chemistry* 2, 3a or 3b and 4; *Military* 1, 2; *Physical Training* 1, 3 or 7.

(Major Electives) Botany 1, 5; Entomology 1; Geology 3; Physical Geography (Geology 8); Household Science 1, 3; Mathematics 6; Physiology 4; Zoölogy 2, 1a or 1b.

(General Electives) Astronomy 4; Economics 22, 26; English 4, 23; French 1; German 3; Greek 2; History 1, 11; Rhetoric 1; Agronomy 6; Animal Husbandry 21.

Second Year

1. *German* 1 or 4; *Military* 2.
2. *German* 3 or 6; *Military* 2.

Third Year

1. *German* 4; *Rhetoric* 1.
2. *German* 5 or 6; *Rhetoric* 1.

CHEMISTRY

To graduate in chemistry the candidate must take, in addition to the subjects of the general prescribed list as printed on p. 112 (including the second alternative in chemistry), the following studies, prescribed for this course:

Chemistry 5b, 9b, 11, 14, 30, 91, 61, 65, or 15b.....	23	hours
Economics 2.....	2	"
English 1 or History 1.....	4	"
German 1, 3, 4, 5.....	16	"
Library Science 12.....	1	"
Mathematics 1 or 2.....	2 or 3	"
Mathematics 6	5	"
Philosophy 2 or 3.....	2 or 3	"
Physics 1, 3.....	8	"

He must further take 22 hours' work from the general list of major electives, subject to the approval of the head of the department; and additional studies, subject to the approval of the College Dean, sufficient to amount to 130 hours' credit in all, including military and physical training.

He must also file a thesis acceptable to the head of the department. Summarized, the course includes:

Chemistry	51	hours
Literature and Arts courses....	32	"
Mathematics and Physics.....	18	"
Elective	25	"
Military and Physical Training. 7	7	"

Total 130 hours

PROSPECTUS OF PRESCRIBED COURSES IN CHEMISTRY

First Year

1. General Elementary Chemistry (Chem. 1); German 1; Mathematics 1, 3 or 2, 4; Rhetoric 1; Military 2; Physical Training 1, 3 or 7, 9.

2. Descriptive Inorganic Chemistry (Chem. 2); German 3; Mathematics 6; Qualitative Analysis (Chem. 3a); Military 1, 2; Physical Training 1, 3 or 7.

Second Year

1. German 4; Physics 1, 3; Quantitative Analysis (Chem 5a); Military 2; History 1, 3 or English 1.
2. German 5; Organic Chemistry (Chem. 9 and 9a); Physics 1, 3; Rhetoric 1; Military 2.

Third Year

1. Assaying or Gas Analysis (Chem. 69 or 65); Library Science 12; Mineralogy (Geol. 5a); Organic Chemistry (Chem. 9b and 14); Quantitative Analysis (Chem. 5b); Seminary (Chem. 90).
2. Economics 2; Geology 1 or French 2; Industrial Chemistry (Chem. 61); Physical Chemistry (Chem. 31); Seminary (Chem. 90); Sanitary Analysis (Chem. 10 or Elective); Chemical Technology (Chem. 6a or Elective).

Fourth Year

- Philosophy 2; Seminary (Chem. 91); Thesis or Elective (Chem. 11); Electives.
2. Seminary (Chem. 91); Thesis (Chem. 11); Electives.

CHEMICAL ENGINEERING

The work of the technical chemist or superintendent is frequently so closely associated with mechanical and other engineering lines as to make a knowledge of these subjects essential. To meet these conditions, the following four years' course in chemistry and related engineering subjects has been arranged. Where options are allowed, the subjects chosen must be such that the total course shall contain the 130 hours' credit required for graduation.

Preliminary preparation in German is required equivalent to two years of high school or one year of University work.

The requirements for graduation in Chemical Engineering are the same as those for Chemistry as indicated on p. 115 except that the special list of prescribed studies is as follows:

Chemistry 5b, 6a, 8a, 9b, 11, 14, 65, 69, 90, 91.....	29	hours
Economics 2	2	"
German 4, 5.....	8	"
Library Science 12.....	1	"
Mathematics 2, 4, 6, 8a.....	15	"
Mechanics 7, 8, 9.....	9	"
Mechanical Engineering 16, 17..	3	"
Mineralogy 7	3	"
Physics 1, 3, 4.....	12	"

Summarized, the course includes:

Chemistry	57	hours
Literature and Arts	17	"
Mathematics and Physics.....	27	"
Mechanics and Mech. Eng'g....	12	"
General Elective.....	10	"
Military and Physical Training..	7	"

Total 130 hours

PROSPECTUS OF PRESCRIBED COURSES IN CHEMICAL ENGINEERING

First Year

1. Drawing (G.E.D. 1b); General Elementary Chemistry (Chem. 1); German 4; Mathematics 1, 3 or 2, 4; Military; Physical Training 1, 3 or 7, 9.

15. Descriptive Inorganic Chemistry (Chem. 2); German 5; Mathematics 6; Qualitative Analysis (Chem. 3a); Military 1, 2; Physical Training 1, 3 or 7.

Second Year

1. Mathematics 8a; Physics 1, 3; Quantitative Analysis (Chem. 5a); Rhetoric 1; Military 2.

2. Organic Chemistry (Chem. 9, 9a); Physics 1, 3; Quantitative Analysis (Chem. 5b); Rhetoric 1.

Third Year

1. Assaying (Chem. 69); Organic Chemistry (Chem. 9b, 14); Physical Measurements (Phys. 4); Mineralogy (Geol. 5a); Seminary (Chem. 90).

2. Chemical Technology (Chem. 6a); Geology 1 or Elective; Industrial Chemistry (Chem. 61); Physical Chemistry (Chem. 31); Seminary (Chem. 90); Theoretical and Applied Mechanics 7.

Fourth Year

1. Fuel and Gas Analysis (Chem. 65); Seminary (Chem. 91); Steam Engines (Mech. Eng'g. 16); Theoretical and Applied Mechanics 8, 9; Thesis (Chem. 11) or Elective.

2. Economics 2; Iron and Steel Analysis (Chem. 8); Seminary (Chem. 91); Steam Boilers (Mech. Eng'g. 17); Thesis (Chem. 11); Elective.

EDUCATION

To graduate with a preparation for the teaching of science in the secondary schools, the student must meet the requirements of the general science course, as described on pp. 113 ff. choosing his major electives in those subjects which he wishes especially to teach, and adding to the prescribed list in general science, education 1, 3 and 7, psychology 1, philosophy 1, and at least four hours more in education or psychology. If he wishes to graduate with a thesis he may count the credits of his major line of science work, with those in education, to make the twenty hours necessary at the beginning of the senior year. His general electives will be taken subject to the approval of the Dean of the College.

ELECTION OF MAJOR COURSES

As a preparation for the teaching of specialties in secondary schools, students are advised to make elections of major work as follows:

Astronomy 1 or 4, 5, 14; 10 or 12 hours.

Botany 11, 1, 2; 15 hours.

Chemistry 1, 2, 3a, 5a, 9c, 31; 23 hours.

Geology 5, 1, 8, 4; 19 hours.

Household Science 1, 2, 3, 5, 9; 11 hours.

Mathematics 2, 4, 6, 8a, 10, 11; 20 hours.

Physics 1 and 3 or 2a, 5a, 6a; 13 to 16 hours.

Physical Geography (Geol. 8); 5 hours.

Physiology 4, 5f; 7 hours.

Zoölogy 10, 1, 2, 9, 17; 19 hours. Entomology 3 may be profitably added to the above.

HOUSEHOLD SCIENCE

It is the purpose of this course to give women a liberal education with a basis of pure and applied science, and to provide for those specializing in science an opportunity for the correlation of their work with special applications of science to the home. To graduate in household science a student must take the studies of the general prescribed list (p. 112), including the first alternative in chemistry, and in addition the following studies especially prescribed for this course:

Art and Design 1, 16; 4 hours.

Botany 1, 5; 10 hours.

Chemistry 5a or 20, 5c; 5 to 10 hours.

Economics 1 and 16B or 17; 7 hours.

Household Science 1 to 10 except 8; 25 hours.

Physics 2a; 4 hours (1st semester).

Physiology 4; 5 hours.

Zoology 10; 5 hours.

Additional subjects sufficient to make the total of 130 hours' work required for graduation may be taken, subject to the approval of the Dean of the College, from any courses offered by the University.

PROSPECTUS OF PRESCRIBED COURSES**First Year**

1. Art and Design 1; Section B, C or D; Chemistry 1; Mathematics 4; Rhetoric 1; Zoology 10.
2. Household Science 1; Chemistry 3b and 4; Botany 1; Rhetoric 1.

Second Year

1. Chemistry 5a or 20; German 1; Household Science 2, 6, 7; Art and Design 16.
2. Chemistry 5c; German 3; Botany 5; Art and Design 16; Household Science 5.

Third Year

1. Economics 1; German 4; Household Science 4; Physics 2a; Architecture 29.
2. German 5 or 6; Household Science 3, 8; Economics 16B or 17.

Fourth Year

Household Science 9, 10.

See elective list and requirements for graduation.

MATHEMATICS

To graduate in mathematics, the candidate must take the subjects of the prescribed list on p. 112 where physics may be substituted for the required work in chemistry, and also mathematics 2, 6, 8a, 8b, 10, 11, 16, 17. He must, further take 20 hours' work from the list of major electives printed on p. 108, which shall include the preparation of an acceptable mathematical thesis (mathematics 15), and ten hours in some line of applied mathematics. The remaining work necessary to complete the 130 hours required for graduation may be selected from any university offerings subject to the approval of the College Dean. The general electives open to students in this course are the same as those open to the students in the General Course in Science. (See p. 113.)

PROSPECTUS OF PRESCRIBED COURSES**First Year**

1. Mathematics 1 or 2, and 3 or 4; German 1 or 4; Chemistry 1 (or Physics 1, 3); Military 2; Physical Training 1, 3 or 7, 9.
2. Mathematics 6; Chemistry 3a or 3b, 4 (or Physics 1, 3); German 3 or 5 or 6; Military 1, 2; Physical Training 1, 3 or 7.

Second Year

1. Mathematics 8a; German 4; Rhetoric 1; Military 2.
2. Mathematics 10, 11; German 5 or 6; Rhetoric 1; Military 2.

Third Year

1. Mathematics 8b, 16; Applied Mathematics.
2. Mathematics 8b, 17; Applied Mathematics.

Fourth Year

1. Mathematics 15.
2. Mathematics 15.

PHYSICS

To graduate from a special course in physics a student must take the studies of the general prescribed list (p. 112), including the first alternative in chemistry, together with the following studies especially prescribed for this course.

Mathematics 1 or 2, 6, 8a (or 7 and 9); 12 to 19 hours.

Physics 1 and 3.

He must further choose from the major elective list (p. 112) physics courses sufficient to bring the total of his credits in physics up to 30 hours, together with additional subjects taken from any university offerings, but subject to the approval of the College Dean, sufficient to complete the graduation requirement of 130 hours. He must also file a thesis approved by the head of his department in the line of his major work.

PROSPECTUS OF PRESCRIBED COURSES

First Year

1. Advanced Algebra and Trigonometry (Math. 2, 4); German 1 or 4; Chemistry 1; Rhetoric 1; Military 2; Physical Training 1, 3 or 7, 9.

2. Analytical Geometry (Math. 6); German 3 or 5 or 6; Chemistry 3b, 4; Rhetoric 1; Military 1, 2; Physical Training 1, 3 or 7.

Second Year

1. Physics 1 or 2, 3; Differential Calculus (Math. 7 or 8a); German 4; Military 2.

2. Physics 1 or 2, 3; Integral Calculus (Math. 9); German 5 or 6; Military 2.

Third and Fourth Years

Physics 5a, 6a, and 10.

COURSE PRELIMINARY TO MEDICINE

To graduate in a general science course, arranged with special reference to medical study following, the student must take the subjects on the general prescribed list, page 112 (including the second alternative in chemistry), and

the following list of studies especially prescribed for this course:

- Art and Design 1.
- Chemistry 9c; 2 hours.
- Botany 5; 5 hours.
- Latin.¹
- Physics 2a; 8 hours.
- Physiology 1,² or 1 and 2.³
- Psychology 1, 6; 5 hours.
- Zoology 10, 2, 3; 16 hours.

Additional studies sufficient to make up the full requirement of 130 hours may be chosen from any university course subject to the approval of the Dean of the College.

The prescribed studies should be taken according to the following prospectus:

PROSPECTUS OF PRESCRIBED COURSES

First Year

1. Art and Design 1; Elementary Chemistry (Chem. 1); Rhetoric and Themes (Rhet. 1); Military 2; Physical Training for Men 1, 3; for Women 7, 9; Trigonometry (Math. 4); Zoology 10.

2. Descriptive Inorganic Chemistry (Chem. 2); Qualitative Analysis (Chem. 3a); Rhetoric and Themes (Rhet. 1); Military 1, 2; Physical Training; for Men 1, 3, for Women 7; Zoology 2.

Second Year

1. German 1 or 4, or Latin; Zoology 3; Quantitative Analysis (Chem. 5a); Military 2; Physics 2a.

2. German 3 or 5 or 6 or Latin; Zoology 3; Organic Chemistry (Chem. 9, 9c); Military 2; Physics 2a.

Third Year

1. German 4; Psychology 1, 6; Physiology 1.

2. German 5 or 6; Physiology 1; Bacteriology (Bot. 5); Electives.

Fourth Year

All electives.

¹Those who offer Latin for entrance must take German in this course; those who offer German for entrance should take its equivalent in Latin before going on with German in the University.

²Sufficient if three-year course is taken.

³Recommended if full four-year course is taken.

To those who take this full four years' course the degree of bachelor of arts is given. Students passing to the Medical College at the end of the above three years of prescribed university work, together with electives sufficient to amount to 97 hours' credit in all, will receive advanced credit there for the following subjects:

Chemistry (general, organic, qualitative and quantitative analysis, and Toxicology), Biology (Zoology), Physiology, Normal Histology, Embryology, and Bacteriology.

Upon completion at the Medical College of the work in human anatomy, physiology of the special senses and of the nervous system, therapeutics, general pathology, pathological anatomy, and surgical pathology,¹ (virtually one year's work), the degree of bachelor of arts will be given at the University at the Commencement next following.

LIBRARY SCIENCE²

To graduate with the degree of bachelor of arts in library science the candidate must take the subjects of the prescribed list on page 112 including the first alternative in chemistry), and also library science 1, 2, 3, 4, 7, 14. He must further take 40 hours' work from the list of major electives, and additional studies necessary to complete the 130 hours required for graduation, which may be selected from any University offerings subject to the approval of the College Dean.

PROSPECTUS OF PRESCRIBED COURSES

First Year

1. Art and Design 1; Chemistry 1; Mathematics 3 or 4; Military 2; Physical Training 1, 3 or 7, 9.
2. Chemistry 3b, 4; Military 1, 2; Physical Training 1, 3 or 7.

¹See Bulletin of the College of Medicine of the University of Illinois, June, 1904.

²See p. 146.

Second Year

1. German 1; Military 2.
2. German 3; Military 2.

Third Year

1. German 4; Rhetoric 1.
2. German 5 or 6; Rhetoric 1.

Fourth Year

1. Library 1, 2, 3, 4, 7, 14.
2. Library 1, 2, 3, 4, 14.

DESCRIPTION OF DEPARTMENTS**ART AND DESIGN**

The general character of the work of this department is described on page 88.

ASTRONOMY

Courses in astronomy are given for students who desire only a general acquaintance with the subject, and also for those who wish to take up the science from its technical side.

The Astronomical Observatory contains a 12-inch equatorial telescope, a 3-inch combined transit and zenith telescope, both by Warner and Swazey, and Brashear, two small equatorials, a Riefler clock, three chronometers, and a number of small instruments for student use. A master clock for the electrical control of the various clocks on the University campus is mounted in the clock room of the Observatory.

BOTANY

Eighteen courses of instruction are offered in this subject. The courses numbered 1 and 2, each of one semester, are intended to serve the double purpose of an introduction to the work which follows for students making botany a specialty, and to afford an opportunity to gain the general

facts of the science and to acquaint themselves with the methods of instruction. To a very large extent natural objects are studied rather than books, but constant endeavor is made to introduce students to pertinent existing literature.

The botanical laboratories are: One of large size with full equipment of microscopes, microtomes, aquaria, models, charts, etc., for general work; one especially arranged for instruction and research in vegetable physiology, having attached a glazed structure, two stories in height, adapted to facilitate experiments upon living plants and to grow specimens required in the laboratories; one fitted up for bacteriological instruction and investigation (in agricultural building) supplied with the necessary apparatus and materials; and several smaller apartments for special purposes.

The department is provided also with a room for the herbarium and facilities for work in connection therewith; work-rooms for the preparation of specimens; storage-rooms for apparatus, utensils, reagents, and materials; dark room for photography, and rooms for offices.

Special attention has been given to parasitic fungi; and the collection of specimens and of literature upon the subject is ample for various lines of original investigation.

CHEMISTRY

The new chemical building has a total floor area of approximately 80,000 square feet. Two main laboratories, with desk room for 350 students, are devoted to general chemistry. Two other main laboratories, with room for 80 students each, are equipped for analytical and organic chemistry. Smaller laboratories are provided for special work in sanitary chemistry, physical chemistry, metallurgy and assaying, gas analysis, food investigation, coal survey and constant temperature rooms for calorimetry.

Special laboratories are also equipped for conducting

the chemical survey of the waters of the state. Numerous small research rooms are provided for special individual work. The chemical library is well supplied with sets of the more important journals and current periodicals. Especially noteworthy is the addition to the seminary equipment of the Palmer Memorial Library, available to all chemical students under suitable restrictions.

ENTOMOLOGY

This department utilizes for purposes of instruction the entomological collections, library, and equipment belonging to the University or made immediately available to students by the State Laboratory of Natural History and the office of the State Entomologist, both permanently established here. The entomological work of the Natural History Survey, now prosecuted continuously, and the scientific and economic studies of the State Entomologist and his assistants, give entomological students extraordinary privileges of experience in the laboratory, the office, and the field, in both scientific and economic work.

The instructional equipment of this department consists of a special laboratory for students, with an ample general apparatus for field work, and two special collections, one for reference by students engaged in the determination of species, and the Bolter collection of 120,000 specimens—maintained separately by the University and open to advanced students under suitable restrictions. The department also owns numerous *papier-maché* models, a collection of wall charts, and many microscopic slides especially prepared for students' use.

GEOLOGY

In this department six courses are offered in geology, three in mineralogy, one in paleontology, one in physical geography, and one in meteorology.

The laboratories are supplied with all the apparatus and tools necessary to carry forward the courses offered, and

the lecture room is fully equipped with maps, charts, models, and other illustrative material.

The collection of fossils comes principally from the paleozoic, but includes a representative series from the higher groups. It contains 49,000 specimens (seven hundred and forty-two of the types described in the reports of the Illinois geological surveys are included) and 200 thin sections of corals and bryozoa.

The collection of minerals contains 12,000 specimens, and that of rocks 9,000 specimens, among which is a large number of polished granites, marbles, and other ornamental building stones, 1,000 thin sections of rocks and minerals, and 575 crystal models.

There is also a collection of Illinois soils containing 104 specimens; and a large collection of Illinois clays with their manufactured products.

HOUSEHOLD SCIENCE

For a description of this department see page 133.

LIBRARY SCIENCE

See Library School, p. 146.

MATHEMATICS

All senior and graduate students who make mathematics their major are required to take in connection with their thesis a year's work (three-hour study) in the mathematical seminary, where the results of their investigation are presented and discussed.

Courses 12, 13, 14, 15, 18, 20, 21, 22, 23, 24, 25, and 26 may count either as graduate or undergraduate work.

The department is supplied with eighty-five of Brill's mathematical models. The collection includes an excellent set of plaster models illustrating the properties of surfaces of the second order, a set of string models for ruled surfaces, a set of paper models illustrating the real circular sections of certain conicoids, a complete set of Brill's models for the

theory of functions, and a collection of surfaces of third order.

MILITARY SCIENCE

See page 322.

PHYSICAL TRAINING

See page 324.

PHYSICS

The department offers a lecture course in general descriptive physics with class-room experiments, extending through the year, and accompanied by an introductory laboratory course in physical measurements. This is followed by two courses, one experimental and the other theoretical. In the experimental course the student is trained in the most exact methods of making the fundamental physical measurements and taught how to discuss his results. The theoretical course running parallel to this discusses, with the aid of elementary calculus, the theory of some of the main subjects of physics. In the senior year the student is supposed to take up some special problem for investigation and to center his laboratory work about that. An advanced mathematical course is also offered for those who wish to follow the most advanced theories and results of the science.

PHYSIOLOGY

The special objects of the courses in physiology are as follows: (1) To give prospective students of medicine a detailed practical knowledge of the normal histological structure and vital processes of the body, and a working familiarity with the instruments of precision used in the investigation of disease. (2) To give students of all branches of biology a training in deducing logically necessary conclusions from data obtained by their own observa-

tions. (3) To furnish such a knowledge of physiology as will serve as a basis for future studies in hygiene.

The department of physiology occupies five rooms in Natural History Hall; a general laboratory, a lecture room, a private laboratory, and an advanced laboratory on the top floor, and an animal room in the attic. The general laboratory, 35 by 56 feet, is fitted at one end with desks for chemical and similar work, and at the other end with tables for use with the microscope and other apparatus requiring a stable support.

PSYCHOLOGY

The laboratory is well equipped with materials and apparatus for a large number of class experiments upon sensation, which the student is required to conduct himself, and of which a careful record is kept. The higher mental functions are then studied experimentally, and the experimenter held responsible for the purity of the experimental conditions and the method of procedure.

A full line of periodical literature is made accessible by the University, and this serves as a basis of reports in the seminary.

For original research the laboratory is well equipped with suitable apparatus and every incentive is given toward a high grade of work.

ZOOLOGY

The options in zoology range from single semester courses to those aggregating four years of continuous work.

The equipment of the department is contained in three students' laboratories, an instructor's laboratory, a lecture room, a private office, a store room, and a dark room for photography. Advanced and graduate students have the use of the library and equipment of the State Laboratory of Natural History, which occupies rooms in Natural History Hall.

COLLEGE OF AGRICULTURE

The College of Agriculture offers an education designed to fit for the business of farming, and at the same time to furnish a means of culture. This education is, therefore, partly technical and partly cultural. Its end is the training of students to be not only successful farmers, but good citizens and successful men.

Of the courses leading to graduation in the College of Agriculture, the technical portion constitutes about one-half of the entire work of the student, the sciences most nearly related to agriculture about one-fourth; and the remaining portion is made up of language, literature, and electives chosen from any subjects taught in the University.

The College also offers, through the department of household science, a variety of courses especially treating of the affairs of the home.

METHODS OF INSTRUCTION

Of the twenty-four instructors in technical subjects, twenty-one devote their entire time to agriculture. The student is brought into close practical contact with his subject. He takes levels, lays tile, tests the draft of tools, traces root systems of corn and other crops, tests germination of seeds, determines the fertility in soils and the effects of different crops and of different rotations upon soil fertility. He does budding, grafting, trimming, and spraying, and works out problems in landscape gardening. He tests milk, operates separators, makes and judges butter and cheese. He studies cuts of meat and samples of wool, judges a great

variety of animals, and has practice in diagnosing and treating their diseases.

EQUIPMENT

The College keeps on deposit several thousand dollars' worth of plows, cultivators, planters, cutters, shellers, grinders, mowers, binders, engines, etc., received from the manufacturers. It has extensive collections of agricultural plants and seeds and their products. Laboratories are well equipped with apparatus and appliances for the study of manures, fertilizers, fertility of soils, soil physics, soil bacteriology, germination of seeds, corn judging, etc. The grounds of the University and the fields and orchards of the Experiment Station are always available for illustration in class work. An illustrative series of colored casts of fruit and enlarged models of fruits and flowers, collections of seeds and woods, cabinets of beneficial and noxious insects, with specimens of their work, photographs, maps, charts, drawings, lantern slides,—all afford valuable material for study and illustration.

Specimens of Morgan horses; Shorthorn, Hereford, Aberdeen-Angus, Jersey, Ayrshire, and Holstein-Friesian cattle; Shropshire, Merino, and Dorset sheep, and Berkshire swine, afford material for judging. This material, moreover, is largely increased by loans from prominent herds. In the dairy department is a complete outfit for milk-testing and for cream separation and butter and cheese making. The department of veterinary science owns a collection illustrating *materia medica*, a collection of pathological specimens illustrating special abnormal bony development, and a *papier-maché* model of a horse, capable of dissection, and showing every important detail of structure. In addition are levels, lanterns, microscopes, and cameras, an extensive list of agricultural journals, a complete file of experiment station bulletins from all the states, and an excellent assortment of standard reference books, including nearly all the pedigree registers published.

DESCRIPTION OF DEPARTMENTS

AGRONOMY

The department of agronomy, with a staff of six, gives instruction in those subjects which relate especially to the field and its affairs, as drainage, farm machinery, field crops, the physics and bacteriology of the soil, manures, rotation and fertility, the history of agriculture, farm management, and comparative agriculture. The object is to acquaint the student with the facts and principles connected with the improvement of soils, the preservation of fertility, the nature of the various crops and the conditions governing their successful and economic production, and with the development of agriculture.

ANIMAL HUSBANDRY

In this department five instructors give courses covering the separate study of sheep, swine, and beef cattle, and their products; heavy and light horses, with their care and training; the management of farm herds, and the principles and practice of feeding and of breeding. The purpose is to familiarize the student with animals, first as to their fitness for specific purposes; second, as to their care and management; third, as to their improvement by breeding; and fourth, as to the commercial production of animal products.

DAIRY HUSBANDRY

Four instructors give extended courses in the study of milk and its economic production; the characteristics of the dairy cow and the management of dairy farms; the separation of cream, and the making of butter and cheese; factory management; dairy bacteriology; city milk supply and the standardizing and pasteurizing of milk and cream.

HORTICULTURE

Five instructors conduct courses in orchard management, small fruit culture and vegetable gardening, nut culture, floriculture, landscape gardening, and forestry; in

fruit propagation, greenhouse management, and the evolution of cultivated plants; and in commercial horticulture and nursery management. The purpose is to acquaint the student with the principles and practice of fruit raising and vegetable gardening, both for home and market, and with successful methods of combating insect and fungus enemies.

HOUSEHOLD SCIENCE

The department of household science stands for a recognition of the importance of adequate and proper training for home duties.

The courses of instruction given in the department are planned to meet the needs of two classes of students, viz.: (a) those students who specialize in other lines of work, but desire a knowledge of the general principles and facts of household science; (b) those students who wish to make a specialty of household science by a comprehensive study of the affairs of the home, together with the arts and sciences whose applications are directly connected with the management and care of the home.

The department occupies the entire second floor of the north wing of the agricultural building, and is supplied with laboratories, apparatus, and illustrative material, such as charts, specimens of various kinds of building material, and exhibits illustrating the chemical composition and products obtained in the manufacture of certain foods.

THREMMATOLOGY

The improvement of domesticated animals and plants and the principles on which it rests are made the special subject of one instructor, who conducts a half-year course of study supplemented with extensive reference readings.

VETERINARY SCIENCE

Courses are offered in veterinary anatomy and physiology, in veterinary materia medica, and in the theory and practice of veterinary medicine and surgery. The object is to acquaint the student with the structure and activities of

animals in health, the characteristic symptoms of disease, and the materials and methods of successful treatment. He therefore makes careful study of the structure of domestic animals and of the nature of their derangements and the characteristic action of remedial agents.

The subjects are taught by lectures and text books aided by demonstrations with use of skeletons, other special apparatus, and of live animals both in health and disease.

Observations are made and practice obtained at the free clinics, which are held at the Veterinary Infirmary once a week, and by post-mortem examinations as cases present themselves. The students assist in the operations, and thus obtain a practical knowledge of the subject. The treatment of disease is illustrated by specimens of all the latest and best remedies used in individual cases.

For courses of instruction in technical agriculture, see under Agronomy, Animal Husbandry, Dairy Husbandry, Horticulture, Thremmatology and Veterinary Science.¹ For courses in the affairs of the home see Household Science, and for non-technical courses see under their respective heads in the body of the catalog.

ADMISSION AND GRADUATION

The courses of instruction offered in this college are open to students on the elective plan, and in general any student may elect and pursue any subject which his previous training enables him to pursue with profit.

Classes are conducted in over eighty different subjects, all of which are open to both regular and special students under such restriction as shall insure sufficient preparation for the particular subject. Students may enter at any time, but it is greatly preferred that they enter at the beginning of classes; viz., at the opening of the year in September, at the beginning of the second semester, about February first, or at the middle of either semester, at which time half semester subjects begin.

¹See General Description of Courses beginning on page 184.

The conditions of graduation are the same as for the other undergraduate colleges of the University—130 credit hours, including certain prescribed subjects, in addition to meeting all entrance conditions.

SPECIAL STUDENTS

Until students have announced their intention to work for a degree and have satisfied all entrance requirements, they are known as special students. Any young man sixteen years old or over, and any young woman eighteen years old or over, may enter as a special student without reference to graduation, electing such work as he is prepared for, and remain as long as the work done is satisfactory. Any such student, however, who is deficient in the correct use of English is required to take that subject in the University or the Academy, according to the amount of his deficiency.

The person who remains but a short time will therefore follow but a few lines of work. If his preparation is deficient he will be confined to those subjects that require little or no previous preparation. He will also be confined to an amount which he can do thoroughly well, and will thus perform substantially the same grade of work as regular students. As the course is largely elective, credit is given for what is actually achieved.

This plan affords the student with a limited amount of time all the advantages of a short course and at the same time secures a good grade of work in the subjects studied.

COURSES OFFERED

This college offers two courses leading to graduation with the degree of Bachelor of Science:

1. Agricultural Course.
2. General Course in Household Science.

AGRICULTURE COURSE

This course is designed to fit young men for the business of farming and the relations of country life. Following are the conditions to be observed by prospective graduates:

PRESCRIBED SUBJECTS¹

Agronomy 6 9, 12; 12½ hours.
 Animal Husbandry 7; 2½ hours.²
 Botany 12; 1 hour.³
 Botany or Zoology; 10 hours.⁴
 Chemistry 1, 3b, 4, 13a; 15 hours.⁵
 Dairy Husbandry 20 or 1; 3 hours.⁶
 Economics 2; 2 hours.
 Entomology 4; 2½ hours.
 Horticulture 1, 10; 8 hours.
 Household Science 8; 1 hour.
 Library Science 12; 1 hour.
 Military 1, 2; 5 hours.
 Physical Training 1, 3 or 7, 9; 2 or 3 hours.
 Rhetoric 1; 6 hours.
 Thremmatology 1; 5 hours.

ELECTIVES

List A.—Animal Husbandry 1 to 5, 10 to 14, 16 to 21; 24½ hours.

Dairy Husbandry 2, 2½ hours.

List B.—English 1, 16; 3 to 8 hours.

Rhetoric 3; 4 to 8 hours.

List C.—Agronomy 1; 2 to 5; 7, 8, 10, 11, 13 to 18; 1 to 63 hours.

Animal Husbandry 1 to 5, 10 to 14, 16 to 21; 1 to 43 hours.

Dairy Husbandry 1 to 9, 11, 12; 2½ to 40 hours.

Horticulture 2 to 9, 11 to 19; 2 to 72 hours.

Veterinary Science 2, 4, 5; 5 to 20 hours.

¹Students not offering six credits in foreign language for admission will take two years of foreign language in the University as a condition of graduation.

²See thremmatology and elective list A.

³Lectures and demonstrations upon bacteria and allied organisms.

⁴Not including the botany and entomology specified in this list.

⁵Chemistry 3 may be taken in lieu of Chemistry 3b and 4.

⁶Not required of students specializing in dairy husbandry.

Suggestions for Open Electives.—Certain subjects not in the above lists are offered especially for agricultural students, viz., Botany 7, Economics 16c, Geology 12, and Meteorology (Geology 14). These studies will be found of unusual interest and value to students of this college.

REQUIREMENTS FOR GRADUATION

Students are graduated with the degree of bachelor of science upon completing the following work:

1. The studies of the prescribed list.
2. Sufficient electives to make a total of 130 semester hours, of which not less than four and one-half shall be chosen from elective list A, not less than three from elective list B, not less than twenty-five from elective list C, and the remainder from any subjects offered in the University, which the student is prepared to take.
3. An acceptable thesis upon an approved course of investigation, and for which from five to ten semester hours will be allowed, according to the nature of the subject. Credit for this is included in the amount to be earned by elective work from lists A and C.

COURSES OF INSTRUCTION

Leading to the degree of B.S. in Agriculture

The following outlines show the most favorable time and order in which the prescribed studies of the course can be taken; and, though it is not insisted that the scheme be followed, students are strongly recommended to follow it, in order to avoid conflicts.

First Year

1. Botany 12 (8; second half)¹; Chemistry 1 (3, 4); Dairy Husbandry 20, first half (6, 7) or 1; second half (6, 7); Military 2; Physical Training 1, 3; Rhetoric 1 (1, 2, 3, 4, 6, 7, 8; M., W., F.); Electives in Agriculture.

2. Agronomy 6 (1, 2); Chemistry 3b (3, 4); 4 (3, 4); Military 1, 2; Physical Training 1; Rhetoric 1 (1, 2, 3, 4, 6, 7, 8; M. W., F.); Electives in Agriculture.

¹The numbers after the subjects refer to the number of the course in the General Description of Courses, pp. 184 ff. The numbers in parenthesis indicate the period of the day at which the work comes. There are nine periods of fifty-five minutes each, beginning at 8 a. m. The letters indicate the days of the week.

Second Year

1. Chemistry 13a (3, 4); Entomology 4 (8 first half); Horticulture 1 (6, 7); Library Science 12 (6:30 M.); Rhetoric or English; Electives.

2. Botany 1 (6, 7) or Zoology 10 (6, 7); Household Science 8 (8); Military 2; Rhetoric or English; Electives.

Third Year

1. Agronomy 9 (1, 2); Dairy Husbandry 10 (3; M., W., F.); Botany 2 (6, 7); Economics 2 (8; M., W.); Electives.

2. Agronomy 12 (1, 2); Horticulture 10 (4; M., W., F.); Electives.

Fourth Year

1. Animal Husbandry 7, first half (3); Threnmatology 1 (4); Electives.

2. Electives, including Thesis.

SUGGESTED COURSE FOR STUDENTS SPECIALIZING IN
DAIRY HUSBANDRY

First Year

1. Botany 12 first half (8; Tu. Th.); Chemistry 1 (3, 4); Library Science 12 (6:30 M.); Military 2; Physical Training 1, 3; Rhetoric 1 (8; M., W., F.); Dairy Husbandry 20 (6, 7); 1 (6, 7).

2. Agronomy 6 (1, 2); Chemistry 3b (3, 4); 4 (3, 4); Military 1, 2; Physical Training 1, 3; Rhetoric 1 (8; M., W., F.); Dairy Husbandry 19 (6, 7); 14 (6, 7).

Second Year

1. Chemistry 13a (3, 4); Entomology 4, second half (1, 2); Horticulture 1 (6, 7); Rhetoric or English; Dairy Husbandry 2 (1, 2); 16 (1, 2).

2. Botany 1 (6, 7) or Zoology 10 (6, 7); Household Science 8 (8); Military 2; Rhetoric or English; Dairy Husbandry 8 (1, 2); 11 (1, 2).

Third Year

1. Agronomy 9 (1, 2); Botany 2 (6, 7) or Zoology 2 (Lect., 4; Tu., Th., arrange Lab.); Economics 2 (8; M., W.); Electives.

2. Agronomy 12 (1, 2); Horticulture 10 (4; M., W., F.); Dairy Husbandry 18 (3); 17 (3); Electives.

Fourth Year

1. Animal Husbandry 7, first half (3) ; Thremmatology 1 (4) ; Dairy Husbandry 15 (6, 7) ; Electives.
2. Dairy Husbandry 7 (3, 4) ; Electives, including Thesis.

GENERAL COURSE IN HOUSEHOLD SCIENCE

This course is designed to provide an education in those branches that especially serve the interests of women students. The work of the course is ranged around the subject of household science, which is treated as of a strictly scientific character. While not losing sight of the practical aspects, the training is, therefore, severely scientific. In connection with the work in household science, and as a necessary preparation for it, the student must take several courses in pure science.

Although the main work is scientific and technical, the importance of an artistic and literary training for home life is not lost sight of, and ample opportunity is given for a study of subjects of that character. Indeed, so important are they deemed that a considerable amount of art and design, English, history, and foreign language is required of students in the course. Opportunity is given, moreover, for increasing the amount of liberal, scientific or technical subjects by leaving the way open for a certain number of electives. Of the one hundred and thirty hours required for graduation, ninety-four are provided for in the prescribed list and the restricted electives of list A¹. The other hours of credit necessary for graduation may be taken, subject to the approval of the Dean of the College, from any courses offered in the University. It is desirable, however, that students should not scatter their work too much; and they are advised, therefore, to choose, to a certain extent at least, electives which are in close correlation with the subjects in the list prescribed, or of restricted elective work. Holders of scholarships in household science in this college take the course as laid out here. Variations

¹See page 140.

from it can be made only by special permission of the Council of Administration on recommendation of the faculty of the college.

PREScribed SUBJECTS

Architecture 29; 2 hours.
Art and Design 1, 16; 4 hours.
Botany 11; 5 hours.
Chemistry 1, 3b, 4; 10 hours.
English 1, 4 or 23; 7 or 8 hours.
History 3; 5 hours.
Household Science 1, 2, 3, 6, 7; 12 hours.
Library 12; 1 hour.
Physiology 4; 5 hours.
Physical Training 7, 9; 3 hours.
Rhetoric 2; 6 hours.

In addition to the above, students will elect as follows:

Botany or Zoology, 5 hours.
English or Rhetoric, 5 hours.
Foreign Language, 20 hours.
¹Elective List A., a minimum of 4 hours.

ELECTIVES

List A.—Architecture 6; 4 hours.
Horticulture 10; 3 hours.
Household Science 5, 10; 5 hours.
Economics 1 and 16B or 17, 7 hours.
Physics 2; 4 hours.

COURSE OF INSTRUCTION

Required for the Degree of B.S. in General Course in Household Science

First Year

1. Botany 11 or Zoology 10; Chemistry 1; Household Science 2; Rhetoric 1; Physical Training 7, 9.
2. Chemistry 3b, 4; Household Science 1; Rhetoric 1; Botany 1; Physical Training 7, 9.

¹If Physics has not been offered for entrance, its equivalent should be elected.

Second Year

1. English 1; Art and Design 1, 16; Foreign Language, Household Science 6; Architecture 29.
2. Household Science 3; English 4 or 23; Foreign Language; Botany 5.

Third Year

1. History 1; Library 12; Household Science 7.
2. Physiology 4; History 1.

Fourth Year

See elective list and requirements for graduation.

GRADUATE SCHOOL

ORGANIZATION

The members of the Council of Administration constitute a committee in charge of the Graduate School. The executive officer, to whom communications should be addressed, is the Dean of the Graduate School.

ADMISSION AND REGISTRATION

Graduates of the University of Illinois, and of other colleges and universities of approved standing, may be admitted to membership in the Graduate School. Other persons, suitably qualified, may gain admission upon such conditions as may be imposed in each case. Candidates for admission may secure application blanks from the Dean and these, properly filled out, should be filed with him, together with any documentary matter showing qualifications for membership in the school. This should be done not later than the time set for registration in September. Admission may be granted at other times, but the time limit required for degrees counts from the date of the certificate of membership.

With the exceptions named below, all members of the Graduate School are required to be in regular attendance at the University, and to do all the work for which they are registered in the departments to which such work belongs. In case of absence on leave, or when absence is necessary to carry on investigations included in approved courses of study, the requirement of continuous residence may be suitably modified.

Graduates of this University may be admitted to non-resident membership in the Graduate School, as candidates for second, or masters', degrees; and all members of the School who have met the residence requirement for advanced degrees may register as non-residents while completing the work for such degrees.

Members of the Graduate School register with the Dean during the registration days, at the beginning of the collegiate year.

Those only are enrolled as members of the Graduate School who enter upon or pursue approved graduate work as explained under "Studies and Examinations" below. Resident graduates who are candidates for bachelor degrees are not included.

STUDIES AND EXAMINATIONS

As far as can be indicated by a statement of time, full work for a graduate student consists in the use of forty-five hours a week in the lecture rooms, laboratories, etc., and in private study. Assignments of work are made upon this basis; but great variations naturally result from the subject-matter in hand, and from the abilities of individuals.

Each student must select one principal line of study, and upon this major subject at least one-half of his work must be done; and any greater proportion of his time, up to the whole of it, may thus be devoted if proper approval is had. When work upon the selected major subject is not arranged to require all of the student's attention, he must choose one or two minor subjects, as may be necessary to complete a full course of study. Usually, at least one minor subject should be taken. Not more than two may be taken at the same time.

The major study must be approved as graduate work for this University, preceded by an amount of undergraduate preparation determined by the officers in charge. The minor subjects may, under approval, be chosen from those offered to graduates; or, except in the College of Engineering, from

undergraduate courses of advanced grade. But all candidates for advanced degrees must direct their selection toward some well-defined end, determined for the most part by the character and purpose of the major study.

In the College of Engineering the major line of study must form not less than two-thirds of the entire graduate course, and must be one course, or some combination of the courses enumerated under the heading of "Courses for Graduates," given with each departmental subject; thus one candidate for an advanced degree may have assigned him as his major subject, Architecture 101, 103, and 107; another, Mechanical Engineering 104 and 107; and the extent to which each of the enumerated subjects is to be pursued may be indicated in credit hours upon the application blanks.

All courses of study leading to degrees in the Graduate School are subject to approval, first, by the head of the department of the University in which the major subject for each student belongs; second, by the Dean of the College including such department; and, third, by the Dean of the Graduate School. The signatures of the heads of the departments in which chosen minor subjects belong must also be obtained before the list reaches the Dean of the Graduate School. The lists of studies, as finally approved, are deposited with the Registrar of the University. No changes may subsequently be made except under the same line of approvals, but extension of time may be arranged with the professors concerned and with the Dean of the Graduate School.

Examinations are required in all subjects, and reports upon these are made to the Registrar of the University. Graduate students in undergraduate classes are examined with these classes.

The head of the department in which the student does his major work is charged with the direction and supervision of such major work, and, in a general way, with the supervision of the student's entire course of study. He fixes

the time and method of all examinations not otherwise provided for, sees that they are properly conducted, and reports results to the Registrar. It is his duty also to keep the Dean of the Graduate School informed concerning all matters affecting the interests of the student, and of the School in connection therewith.

DEGREES AND FELLOWSHIPS

A full statement regarding the degrees conferred by the University may be found on later pages of this catalog, and in the same connection an account of fellowships. (See pp. 309-314.

STATE LIBRARY SCHOOL¹

AIMS AND SCOPE

It is the purpose of the Library School to offer instruction (1) to students who wish to specialize in library work as a profession, and (2) to students who wish to elect liberal library courses as part of a general education.

The school was established at Armour Institute of Technology, Chicago, in September, 1893, and was transferred to the University of Illinois in September, 1897. In its ten years of existence it has advanced its entrance requirements from high school graduation to three years of university work and has extended its instruction from one year to two years. There is now offered a five years' course of study, leading to the degree of bachelor of library science. Three years of the course are devoted to general university studies, and students are urged to complete a four years' college course before applying for admission.

The fourth year combines technical and liberal work and leads to the degree of bachelor of arts in library science. The fifth year is advanced and comparative technical work with the addition of bibliographical and historical subjects. The degree of bachelor of library science is conferred on the completion of the work through this fifth year. Electives are here introduced to allow for personal preference and fitness for different positions. The practical work of the course amounts to over three months of time, counting eight hours a day, and this is more valuable, because more varied, than if taken in three consecutive months in a

¹A special circular describing the work of the Library School in detail may be obtained on application to the Registrar.

library. Moreover, the library school student has the benefit of comparative study, while the apprentice becomes skilful in the ways of one library only.

Although elaborate methods are taught to enable students to work in large libraries where bibliographic exactness is required, stress is laid throughout the course on simplicity and economy of administration. Moreover, emphasis is constantly laid on the responsibility of the librarian to the schools and clubs and to the community at large.

It is the policy of the School that each instructor shall be engaged in active library work so that the instruction may be practical.

The general student, not a candidate for the degree of bachelor of arts in library science, may elect, in his senior year, any subject in the list of library electives for which he is prepared. Such subjects have been indicated as will help the student in general reading, in research work, in club work, or as a member of a library committee or board of trustees. For the general student who does not care to take the required fourth year of the Library School, nor to elect any regular library course, the School offers a course of fifteen lessons on the use of the library and the ordinary reference books. This course is open to students in all classes.

METHODS OF INSTRUCTION

There are so few text-books on library economy that instruction is given almost altogether by lecture and laboratory methods. References to books and periodicals are given for collateral reading, and individual research is encouraged. Lectures are illustrated by the collections of forms and fittings, and each student is expected to do a certain amount of practical work in the University library each day. Before completing the course, each student must have had actual experience in every department of the

library. Class room work is tested by problems, and examinations take the form of problems wherever practicable.

LOCAL LIBRARY COOPERATION

The library of the University of Illinois and the Champaign Public Library have systematic plans for co-operation through the Library School, in the interest of the clubs. Each woman's club in Champaign and Urbana sends its program for the year to the Library School, where a reference list is made on each subject, specifying in which library the material is to be found. A copy of each list is posted in each library.

EQUIPMENT

The most valuable equipment is the working library of the University.

The Library School has the complete collection of manuscript notes and problems which have been prepared since the School opened in 1893, and a collection of library reports and catalogs and of mounted samples, showing methods of administration in all departments. A collection of card catalogs of various forms has been made, including the book forms from Leyden, Holland; Cassel, Germany; and Florence, Italy; and the modern forms approved by the American Library Association. Other forms are represented by photographs.

The School has a collection of printed blanks and forms illustrating methods of administration in different types of libraries, many labor-saving devices, and samples of fittings for all departments.

A collection of cataloging rules and of classification systems is making for comparative study. A number of devices and patents, such as temporary binders, pamphlet cases, newspaper files, etc., have been contributed by inventors and manufacturers.

REQUIREMENTS FOR GRADUATION

Credit for 98 hours,¹ including the prescribed military and physical training, in addition to two years' technical library work, is required for graduation. The technical work must be taken at the University, but the work of the first three years may be taken at any college from which credits are accepted by transfer.

COURSE OF INSTRUCTION

Required for the degree of B.L.S.

The work of the first three years must consist of the prescribed subjects, either in the College of Literature and Arts (p. 79) or in the College of Science (p. 111), together with enough electives to make at least ninety-eight hours altogether. Fifteen to eighteen hours' work a week, including military and physical training, must be chosen each semester. Students are advised to elect as much work as possible in modern languages, history, literature, science, and economics. Special attention is called to comparative literature and philology 1, 2, 3; statistics (Econ. 23, 24); history of American Literature (Eng. 16); bibliography of history and the social sciences (Econ. 40).

Fourth Year

1. Elementary Library Economy (Lib. 1); Elementary Reference (Lib. 2); Selection of Books (Lib. 3); History of Libraries (Lib. 7); Library Extension (Lib. 14); Elementary Laboratory Course (Lib. 4).

2. Elementary Library Economy (Lib. 1); Elementary Reference (Lib. 2); Selection of Books (Lib. 3); Library Extension (Lib. 14); Elementary Laboratory Course (Lib. 4).

¹See page 184.

Fifth Year

1. Advanced Library Economy (Lib. 5); Bibliography (Lib. 6; Advanced Reference (Lib. 8); Public Documents (Lib. 13)¹ Advanced Laboratory Course (Lib. 10); Thesis (Lib. 11).

2. Advanced Library Economy (Lib. 5); Bibliography (Lib. 6; Advanced Reference (Lib. 8); Public Documents (Lib. 13)¹ Advanced Laboratory Course (Lib. 10); Thesis (Lib. 11).

¹Electives for library students.

SCHOOL OF MUSIC¹

AIMS AND SCOPE

The School of Music offers regular courses leading to the degree of bachelor of music, and furnishes opportunity to students not candidates for a degree to spend an indefinite amount of time in the study of an instrument or of the voice.

Concerts are given each season under the management of the School of Music. In these concerts, to which an admission fee is charged, only artists of the best reputation appear.

The instructors in the School of Music give recitals and lectures on musical subjects during the year.

The course in the history of music, as well as the work in the University Orchestra and the University Choral Society, may be taken by students in other departments.

REQUIREMENTS FOR GRADUATION

Credit for 130 semester hours,² including military and physical training credit, together with an acceptable thesis, is required for graduation. The thesis must be on a topic related to music.

Students who are not working for the degree in music may receive a statement from instructors upon completing not less than one year of college work.

Special and preparatory music students are required, in

¹A special circular giving complete details of the work of the School of Music may be obtained on application to the Registrar.

²See p. 184.

addition to their practical work in music, to take a certain amount of other studies.

Students enrolled in the department of music only, pay no semester fees, but must pay the music fees. (See p. 332).

Classes in ear-training meet twice each week. The fundamental principles of musical notation are studied thoroughly, and the ear is trained to recognize intervals, chords, etc., so that the student may eventually think music. Music students are required to attend these classes.

The sight singing classes meet twice each week. This work is required of music students and is open to any University students who desire to take it.

CLASSIFICATION OF SUBJECTS

Music 1; 4 hours.

Music 2; 4 hours.

Music 3; 6 hours.

Music 4; 6 hours.

Music 5; 5 hours.

Music 7, 8, 9, 10; or 12, 13, 14, 15; or 17, 18, 19, 20; 58 hours.

French or German; 16 hours.

Italian 1; 6 hours.

Mathematics 4; 2 hours.

Military 1 2; 5 hours.

Physical Training—

Men, 1, 3; 2 hours.

Women, 7, 9; 3 hours.

Physics 2a; 4 hours.

Rhetoric 1, 7a; 8 hours.

The remaining hours of credit may be obtained in electives offered in the College of Literature and Arts.

MUSICAL ORGANIZATIONS

The University Glee Club is an organization for men. Membership is decided by competition and is limited to sixteen in number. The club meets twice a week for rehearsal.

The Ladies' Glee Club is an organization for the young

ladies of the University, and is in charge of the head of the vocal department.

The Mandolin and Guitar Club is open to young men. Membership is decided by competition, and the club is associated with the Glee Club in its concerts.

The Military Band is conducted by the Director of the School of Music. It furnishes music for important University occasions and appears at regimental drill of the military department, besides giving several concerts during the year. Membership is limited in number and is decided by competitive examination.

The University Orchestra meets for a two hours' rehearsal once a week, and is open to all students who play any orchestral instrument ordinarily well.

The University Choral Society is conducted by the Director of the School of Music, and meets once a week for rehearsal of choral works. A small fee is charged for membership, and singers not connected with the University are admitted.

COLLEGE OF LAW¹

REQUIREMENTS FOR ADMISSION

1. All applicants for admission to the College of Law must be at least 18 years of age and of good character.

2. Graduates of colleges and of scientific schools of approved standing are admitted upon diploma or certificate, without examination.

3. Graduates from any accredited high school in the state are admitted in the same way.

In the absence of proper certificates the usual examinations for admission to the freshman class of the University (pp. 63 ff) are required of those who enter as candidates for a degree.

ADVANCED STANDING

The following classes of persons are admitted to advanced standing:

1. Persons who produce from another law school, in good standing, certificates of having satisfactorily pursued courses in law, included in the following schedule, and of having received credit therein, *provided* that the time spent on such courses is equivalent to the time spent on the same courses in this College. Otherwise, an examination on such courses, given by the instructors in this College, must be satisfactorily passed.

2. Persons who have studied law privately, or in an attorney's office, and pass examinations prescribed by the faculty of the College.

¹A special circular describing the work of the College of Law in detail may be obtained on application to the Registrar.

3. Members of the bar of this state, who will be admitted to the third-year class without examination, as candidates for the degree of LL.B.

SPECIAL STUDENTS

Students who do not desire to be candidates for a degree may take one or more courses as special students, upon approval of the faculty of the College, under regulations prescribed by the University (p.72). Such students receive credit for work satisfactorily done, and may become candidates for graduation at any time by meeting the requirements of the College.

METHODS OF INSTRUCTION

The methods of instruction used in this College are based largely upon the study of cases. Text-books are used to some extent, and lectures are occasionally resorted to, but the study of the case is regarded as the chief means to the attainment of legal knowledge and proficiency.

LIBRARY AND MOOT COURT

The library consists of the leading text-books on all subjects: United States Supreme Court Reports; English Reports; Reports of the principal states of the Union; American Decisions; American Reports and American State Reports; the current volumes of the West Company Reporter System, and the leading legal periodicals.

The Moot Court is held once a week for the purpose of familiarizing the student with legal procedure. It is presided over by the Dean, Judge O. A. Harker, the other officers being elected by the law students from their own body. All second and third year students are required to be present, and to perform such duties as may be assigned them.

LEGAL STUDY AND UNIVERSITY WORK

The Council of Administration will, upon application, in proper cases, apply credits earned in the College of Law upon other University courses.

Students matriculating in the College of Law may take courses in other colleges of the University on approval of the Dean of the College of Law and the professors concerned.

COURSE OF INSTRUCTION

*Required for the Degree of LL.B.***First Year**

1. Contracts (Law 1); Torts (Law 2); Real Property (Law 3); Pleadings (Law 4); Personal Property (Law 6); Analysis of Cases (Law 33).

2. Contracts (Law 1); Torts (Law 2); Real Property (Law 3); Criminal Law (Law 5); Domestic Relations (Law 7).

Second Year

1. Wills (Law 18); Evidence (Law 8); Real Property (Law 10a); Equity (Law 12); Damages (Law 13); Carriers (Law 14); Moot Court (Law 26).

2. Sales (Law 9); Real Property (Law 10b); Agency (Law 11); Equity (Law 12); Equity Pleading (Law 20); Moot Court (Law 26).

Third Year

1. Advanced Pleading (Law 4a); Bills and Notes (Law 15); Trusts (Law 16); Constitutional Law (Law 22); Corporations, private (Law 17); Moot Court (Law 26).

2. Bills and Notes (Law 15); Partnership (Law 19); Corporations, municipal (Law 24); Suretyship (Law 21); Mortgages (Law 21a); Constitutional Law (Law 22); Moot Court (Law 26).

In addition to the foregoing course of instruction, required for the degree of LL. B., the following subjects are offered as electives in the College of Law:

Insurance (Law 28); Bankruptcy (Law 30); Conflict of Laws (Law 31); Quasi-Contracts (Law 32).

REQUIREMENTS FOR GRADUATION

The requirements for graduation with the degree of bachelor of laws are seventy-two semester hours of work. A "semester hour," as here used, means one hour per week of class-room work for one-half of a year. The degree is conferred upon the completion of the course set forth above.

ADMISSION TO THE BAR

Under the rules of the Supreme Court of Illinois, candidates for admission to the bar of this state must have had a high school education or its equivalent, must have completed a three years' course of study in a law school or law office, and must then pass an examination to be given by the State Board of Bar Examiners.

COLLEGE OF MEDICINE

(For faculty of the College of Medicine see page 26).

HISTORY

The College of Medicine, the College of Physicians and Surgeons, is located on the corner of Congress and Honore Streets, Chicago, in the heart of the medical quarter of the city. It was founded in the year 1882 by a number of representative physicians and surgeons. In 1892 the College had a thorough organization, and erected a commodious laboratory building, the first building exclusively for laboratory purposes erected by any medical school in the West. Since that time it has grown with steadiness and rapidity. It became the Medical Department of the University in April, 1897.

Chicago is already the center of medical study in the United States. Since the winter of 1897-98 it has contained a larger number of medical students than any other city in the western hemisphere. These students are distributed among fourteen medical colleges, of which the College of Physicians and Surgeons is the first as to the size of its classes, and is not outranked by any in respect to its facilities, or the scope and thoroughness of its curriculum, or in regard to the place it occupies in the esteem of the medical profession.

REQUIREMENTS FOR ADMISSION.

First, a certificate of good moral character from two reputable physicians.

Second, a diploma of a state normal school, of an accred-

ited high school or academy of the University of Illinois, or of a similarly accredited school of another university, whose entrance requirements are equivalent to the entrance requirements of the University of Illinois.

Third, a certificate of admission to a literary or scientific college whose standards are equal to those of the University of Illinois.

Fourth, a teacher's permanent or life certificate issued by a state authority.

Fifth, a certificate of successful examination conducted by a state board of medical examiners whose standards are equal to those of the Illinois State Board of Health.

Sixth, a certificate signed by a principal of a regularly organized high school or by the examiner of the faculty of a recognized literary or scientific college or university, or by the State or City Superintendent of Public Instruction, or a Superintendent of Public Schools, of having successfully passed an examination in all the branches embraced in the curriculum of a four years' course of an accredited high school.

Seventh, entrance examination covering the following subjects¹: Algebra, Composition and Rhetoric, English Literature, Latin or French or German, Plane Geometry, History, Physics, Civics.

The entrance examinations are conducted in writing by a committee, outside of the Faculty of the College of Medicine, appointed by the President of the University, and are held, when there are applicants, at the College at 10 a. m. on the days preceding the opening of each term.

REGISTRATION

All students are required to register in the office of the Secretary immediately upon the opening of the term for the work in that term, and credit will be allowed only in the branches in which the student is registered.

¹For the description of the amount and character of work required in each subject, see pp. 65 ff.

ADVANCED STANDING

Applicants holding the degree of A. B. or B. S. or an equivalent degree from a regularly established college of Arts or Science, which requires an attendance of three or more years as an essential to graduation, may be given credit for work done in the branches of the medical curriculum of the first year, and may be advanced to the sophomore year of a four years' medical course, on condition that they comply with the entrance requirements and that they subsequently complete the work of the freshman year, if not already completed, and that the work already taken shall *not* be below the standard required by this College.

Students who have completed a "medical preparatory course," equivalent to that given by the University of Illinois, and graduates of reputable schools of dental surgery, whose course extends over two years, may enter the sophomore class and complete their studies upon three years of attendance, provided they fulfill all other requirements for admission and graduation. *Students thus advanced may not complain of any conflict of hours, nor absent themselves from any part of the lower conflicting course;* but they may make up deficiencies in the work of one term in any other term in which such work is offered.

Students who present evidence of having attended one or more years at other medical institutions in good standing with The Illinois State Board of Health may be admitted to advanced standing, and receive credit for time and for the work which they have completed in the preceding years of the curriculum.

Graduates of medical colleges in good standing with the Illinois State Board of Health may be admitted to the graduating class without examination by complying with all the other requirements of under-graduates.

Examinations for advanced standing are held *only during the week* immediately preceding the opening of the term.

COURSE OF STUDY

The collegiate year is divided in two terms, called respectively the winter term and the summer term. The winter term consists of a session of thirty-six weeks beginning September 26th, 1905, and ending June 5th, 1906, at which time the annual graduating exercises are held. The summer term consists of a session of twelve weeks of actual teaching, beginning June 6th, 1906. Attendance upon the winter term is required in order to secure credit for a year's work, and attendance upon four winter terms is required for graduation, except for students who are admitted to advanced standing, as set forth upon page 160. Attendance upon the summer term is optional, and the work is supplemental to the work of the winter term. Students may obtain credit for work done in certain branches, but attendance upon this term does not apply upon the required thirty-six months' attendance necessary for graduation.

The curriculum required for graduation extends over four years. During the first two years the work is confined to the sciences fundamental to practical medicine. During the freshman year this consists of work in histology, biology, embryology, chemistry, materia medica, human anatomy and physiology. During the sophomore year the study of physiology, chemistry and human anatomy is continued, and in addition the student takes up pathology and bacteriology. With the junior year the study of the practical branches of medicine is begun. The student also begins clinical and bedside work, and receives instruction in medical and surgical specialties. During the junior and senior years 1,000 hours of work are required in each year. Of this 1,000 hours, approximately 600 are "Specified," and the balance "Elective." This plan permits a student to specialize along the lines best suited to his purpose. A certain amount of clinical work is required, but the student is permitted to elect the work offered by all clinical teachers and permitted to attend all lectures and clinics.

METHODS OF INSTRUCTION

During the first two years the time of the student is about equally divided between laboratory and didactic work. The plan of instruction in the College contemplates the freest use of laboratory teaching. Wherever possible, practical laboratory work is made to supplement didactic teaching. Students are taught not only by prepared specimens, but they are required to prepare their own specimens from the original material and are thus made familiar with technical methods, so that they become able independently to carry a technical investigation through all of its stages. During the junior and senior years the time is about equally divided between clinical and didactic work (much of which is done in class room), with a preponderance of clinical instruction in the senior year. This clinical instruction is carried on, as far as possible, with the student at the patient's side. Attendance upon clinics is required in the same way as upon lectures, and the students are graded upon, and given credit for, their work in the clinical courses, just as they are for the work in the didactic and laboratory courses. The students of the junior and senior years are divided into classes for dispensary work, and these classes have instruction in rotation in the various departments of practical medicine and surgery.

BUILDINGS AND EQUIPMENT

In the summer of 1901 the College purchased from the Board of Education of Chicago the West Division High School property, situated adjacent to the original college building. This purchase, which represents, including alterations, an expenditure of over a quarter of a million of dollars, gives the College three-fourths of a city block lying between Harrison and Congress, and Honore and Lincoln streets, and a group of buildings which, for the purpose of medical education, are unsurpassed in the United States, and equalled in only a few instances in the world. The

new College building is a brick and stone structure two hundred feet long by one hundred and ten feet deep, and five stories high. It fronts on four streets and stands on a lot entirely adequate in size for such a building, so that it is freely supplied with air and light. The building contains three large lecture rooms with a seating capacity of two hundred each, a clinical amphitheater modeled on modern plans for perfect asepsis, with a seating capacity of over three hundred; an assembly hall with a seating capacity of twelve hundred, and many recitation rooms seating from thirty to one hundred and fifty students each. It also contains special laboratories for physiology, chemistry, pathology, bacteriology, biology, materia medica, and microscopical or chemical diagnosis, each capable of accommodating from fifty to two hundred students at a time. The general equipment of the building and the special equipment of the laboratories are in keeping with the size and character of the building, and may challenge comparison with those of any other school in the country. The assembly hall is so constructed that it may be converted into a gymnasium. It is provided with all the apparatus of a well equipped gymnasium, including numerous shower baths, and gives the College a gymnasium which is fully equal to those possessed by the better class of undergraduate colleges. The use of the gymnasium is free to all the students of the College, and a competent instructor in physical training is employed.

The original college building has been remodeled and is now occupied by the School of Dentistry which the College has established, and by the laboratories of anatomy.

HOSPITALS AND HOSPITAL FACILITIES

The West Side Hospital, containing 125 beds, owned by members and friends of the Faculty, is connected to the College by a corridor, and its clinical facilities thus made easily available for the instruction of the students. Adjacent

to the College building is the Cook County Hospital, with approximately 1,000 patients, supplying a quantity and variety of material which no private institution can command. In the amphitheater of the hospital, much of the clinical instruction of the College is given. In addition to the foregoing resources, members of the Faculty are connected with various other hospitals situated in different parts of the city, and draw freely upon them for the benefit of the students.

QUINE LIBRARY

The Quine Library is the best equipped private medical library west of the Alleghany Mountains. It contains all standard text books, books of reference and periodicals for the use of medical students, and is under the direction of a trained librarian.

REQUIREMENTS FOR GRADUATION

1. Satisfactory evidence of good moral character.
2. Satisfactory evidence that the candidate is at least 21 years of age.
3. Attendance during four collegiate years, the last of which must have been in this institution, and the completion of the required work of each year.
4. The study of practical anatomy during two years, and to the extent of having dissected at least the lateral half of the body.
5. Attendance upon two full courses of dispensary clinics, and two full courses of hospital clinics.
6. Satisfactory deportment.
7. Payment in full of all fees.

For catalog and detailed information address

SECRETARY COLLEGE OF MEDICINE,

Congress and Honore Streets, Chicago, or

REGISTRAR, University of Illinois, Urbana.

SCHOOL OF DENTISTRY

For Faculty of School of Dentistry see p. 33.)

BUILDINGS AND EQUIPMENT

The School of Dentistry of the University of Illinois begins its fifth collegiate year October 5th, 1905.

The establishment of the School of Dentistry by the State University insures a stability and an earnest of future development and of high character of this department that must commend itself to all well-wishers of the dental profession.

The College occupies its own building, situated on the corner of Harrison and Honore streets in Chicago. This building is a six-story stone and brick structure, constructed at a cost of \$100,000, and is occupied exclusively by the School of Dentistry. It is commodious and complete in every particular. The building stands on the corner of two wide streets and is separated from the adjacent buildings on the north and east by wide, open spaces, so that the provisions for ventilation, and especially for light, are of the best possible character. It is located directly opposite the Cook County Hospital, in the center of the clinical field of Chicago, and is thus at all times insured of abundance of clinical material. Adjoining the school on the west is the West-Side Hospital, and on the north are the new buildings of the College of Medicine of the University of Illinois.

The Infirmary occupies the entire top floor of the main building. Large skylights, as well as north, east, south and west sidelights assist in making the Infirmary ideal. As there are no immediately adjoining buildings, the light is

unobstructed on all sides. The height is such that the observer has a birds-eye view of the city in all directions.

The Infirmary is divided into the Operative, Prosthetic and Orthodontia sections.

These departments are equipped with new chairs of the latest improved pattern, with fountain cuspidors attached, double-decked stands for accommodating students' operating cases, and sanitary washbowls with hot and cold water, formaldehyde instrument sterilizer and all appliances that in any way assist in making the Infirmary a model.

The Infirmary has adjacent to it a prosthetic laboratory, in which the students can do their molding, soldering and fusing. Compressed air apparatus, electric ovens for porcelain work, electric lathes, and such other apparatus as go properly to equip an ideal prosthetic laboratory are provided.

A large passenger elevator operated by electricity connects all floors.

ADMISSION AND GRADUATION

Students applying for admission should bring with them such certificates and diplomas, academic or professional, as they may possess. The point system is recognized by this school.

The rules and regulations passed by the National Association of Dental Faculties for the government of its members have been adopted by the faculty of this school.

Six years ago a radical change was made by dental schools in the method of examination for admission. Formerly these examinations were made by the officials of the dental schools, but the faculties' association, in 1898, passed a rule requiring that these examinations be made by public school officers in the locality in which the applicant resides.

Therefore students without diplomas or teachers' certificates, desiring to matriculate in this school, must bring with them certificates signed by a county, state, or city superintendent of schools, or a principal of a high school.

These certificates must show the applicants to have completed the second year of high school work, or its equivalent, in order to entitle them to enter this school for the term beginning October,

1905. Such certificates will not be required of applicants who present diplomas from recognized high schools or colleges.

Students of both sexes are admitted on equal terms.

The monthly report of attendance, and the standing of pupils in quizzes, recitations, laboratory work and in infirmary practice, both operative and prosthetic, is considered in making up the rating of final examinations.

For further information regarding credentials of admission other than already specified, communicate with the Dean.

Graduates of reputable medical colleges are admitted to the second year's class, and are excused from lectures and examinations upon general anatomy, chemistry, histology, pathology and physiology, but are required to take lectures and examinations in special materia medica and therapeutics, pathology, histology, operative and prosthetic technics, in accordance with the rules of the National Association of Dental Faculties.

Students presenting passing grades from other recognized schools covering subjects required in this college, will be credited with such grades. Persons presenting A. B. or B. S. from recognized institutions will be credited.

The degree of Doctor of Dental Surgery is conferred on students who complete the course of instruction, perform the work required and pass satisfactory examinations. To be eligible to the degree, the student must be twenty-one years of age, possess a good moral character, and must have paid all fees.

METHODS OF INSTRUCTION

Instruction is given by means of lectures and recitations, demonstrations and laboratory work. The time of the student is about equally divided between laboratory and clinical work on the one hand, and lectures and recitations on the other. The work of each session will be complete in itself, hence a graded course. Credits are given as the work proceeds.

Students are admitted to the laboratories from the beginning of the first year. The laboratory work is so arranged as to maintain the best relationship to the lectures and clinical studies.

In the clinical work, methods both of investigation and of reasoning are carefully and systematically taught. The diagnosis, prognosis and indications for treatment will receive no less attention than the methods of construction and the technique of procedures.

Fees¹ are payable in advance. Students unable to meet these requirements must make satisfactory arrangements with the DEAN or ACTUARY at the beginning of the course.

This announcement applies to the session beginning Oct. 6th, 1905, and all requirements, fees and regulations mentioned in it apply to this school year alone. The Trustees of the University reserve the right of making changes in succeeding announcements.

These conditions cannot be modified except upon the written consent of the proper officials of the University.

For such students as intend practicing in States requiring a four-year course there will be ample provision made and announced in the next year's catalog.

Good board and rooms convenient to the school can be obtained at prices varying from three to five dollars a week, according to the accommodations; also vacant rooms without board, furnished or unfurnished, can be obtained at from six to ten dollars per month.

For further information relating to the School of Dentistry, address

DEAN SCHOOL OF DENTISTRY

Cor. Harrison and Honore Streets, Chicago, Ill., or the
REGISTRAR of the University, Urbana, Ill.

¹See p. 333 for statement of fees.

THE SCHOOL OF PHARMACY

(For Faculty of School of Pharmacy see p. 35.)

HISTORY

The School of Pharmacy was originally the Chicago College of Pharmacy and was incorporated under that name, September 5th, 1859. Prior to that time there were but three schools of pharmacy in the country and these were located in the eastern states.

While the primary object of the institution was to provide instruction in the science and art of pharmacy, yet other functions were also developed. Thus, a code of ethics was early adopted by the members, successful efforts were made to bring about better relations between pharmacists and physicians, the pioneer pharmaceutical library was established and for eighteen years, beginning with 1868, a monthly journal, "The Pharmacist"—the first of its kind in the West—was published.

In October, 1859, the first course of lectures was instituted, occupying three evenings a week for a period of six months. Of the first class, but two students were graduated in 1861. The war caused a suspension of the teaching, and the school was not reopened until 1870. The great fire, in 1871, destroyed the equipment, but pharmacists throughout Europe and America extended help to the institution, furnishing an excellent library and outfit of apparatus, which became the nucleus of the present complete equipment. In 1872 the instruction was resumed for the second time and has since continued without interruption.

In 1880 the members and graduates of the College took an active part in the formation of the Illinois Pharmaceutical

Association, which, in the following year, secured the passage of the pharmacy law.

The twenty-fifth anniversary of the founding of the College was signalized by the removal of the College to a larger building at 465 State street. Up to this time instruction had been given mainly by means of lectures, laboratory work being entirely optional. Laboratory courses in pharmacy, chemistry and vegetable histology were now made obligatory. A laboratory devoted entirely to prescription compounding was established in 1892.

The College was formally united with the University May 1, 1896, and is now conducted as the technical "School of Pharmacy of the University of Illinois." In the management of the School, the trustees and officers of the University have the assistance of an advisory board of pharmacists, elected by the registered pharmacists of the State through the Illinois Pharmaceutical Association.

NEW BUILDING

The School of Pharmacy is located in the building formerly occupied by the Chicago Manual Training School, at Michigan boulevard and Twelfth street. The building is a substantial brick structure, five stories in height, with a frontage of fifty feet on Michigan avenue and one hundred and seventy feet on Twelfth street. There are large windows on four sides, giving excellent light, and the rooms are heated by steam throughout.

The location is an ideal one, being near the center of the city and convenient to the various lines of transportation, yet removed from the noise and bustle of the business district.

A half block east of the building is the Illinois Central Depot, and one block west are the Cottage Grove avenue, the Indiana avenue and the Twelfth street surface lines, and the Twelfth street station of the South Side Elevated Railroad.

On Michigan avenue, immediately south of the School,

are to be found some of the best low-priced boarding and rooming places in the city. Satisfactory accommodations may be readily secured within a short distance of the School.

EQUIPMENT

The entire east end of the building is occupied by lecture halls, of which there are four, arranged one above the other and having a seating capacity of from one hundred and twenty to three hundred persons.

The laboratories are five in number and together have work-stands sufficient for three hundred and thirty-two students working at the same time. Adjoining the halls and the laboratories are preparation rooms of ample size for the use of the professors and instructors. All the rooms have excellent light and ventilation and abundant blackboard space. The supply of compound microscopes, analytical balances and special apparatus is exceptionally complete and the collections of crude drugs, medicinal plants, chemicals and pharmaceutical products are varied and extensive.

The library contains about two thousand volumes, including, in addition to the usual works of reference, many rare books. Complete files of the leading pharmaceutical journals are an important feature.

COURSE OF INSTRUCTION

The course of instruction is divided into a junior and a senior year, each seven months in length, and affords opportunity for a thorough technical training, such as is necessary for the successful practice of pharmacy or as a preparation for some special line of related work. The subjects taught are chemistry, general, pharmaceutical and analytical; pharmacy, theoretical, manufacturing and dispensing; botany; physiology and materia medica.

The system of teaching embraces lectures, illustrations, demonstrations, recitations, written and oral examinations and individual practice and personal instruction in the various laboratories, much time being devoted to this important part of the student's work.

ADMISSION AND GRADUATION

Applicants for admission must be at least sixteen years of age, and must furnish evidence of their ability to prosecute the work of the course successfully.

The preliminary education should be equivalent to that required for entrance to a good high school.

Students who have pursued courses of study in other colleges of pharmacy will be given credit for such portions of their work as are equivalent to the work required by this School.

The regular session opens September 26, 1905, and ends April 26, 1906.

The candidate for the degree of graduate in pharmacy must be twenty-one years of age, have had four years' practical experience in pharmacy, including the period of attendance at college, and must have attended two annual courses of instruction, the first of which may have been in some other reputable college or school of pharmacy. He must have attended regularly the laboratory and lecture courses of this School, and have satisfactorily finished the work required.

The candidate for the degree of graduate in pharmacy, who presents himself for final examination before he has attained the age or practical experience required, will, if successful, receive a certificate of having finished the course and will be awarded his diploma when the requirements of age and experience are complied with.

Persons competent to fulfill the general requirements of admission to the University may be granted credits upon other University courses for equivalent work completed at the School of Pharmacy.

Further information may be found in the special announcement of this school, which may be obtained from the ACTUARY SCHOOL OF PHARMACY, Michigan Avenue and Twelfth street, Chicago, or the Registrar, University of Illinois, Urbana.

SUMMER SESSION

The Summer Session of 1905 will open Monday, June 12, continue nine weeks and close Friday, August 11. No examinations or other conditions will be placed upon admission. All who can do the work are welcome to get what they can from it. Those who can meet the requirements may matriculate in the University if they desire, and in that event, upon examination, may receive credits to apply upon regular University courses. Examination in and credit for some of the courses may be had at the end of six weeks by any who find it impossible to remain during the whole session. Instruction begins on June 13, and closes August 9.

The libraries, laboratories and gymnasiums of the University are open to students in the Summer Session.

FEES

A tuition fee of twelve dollars (\$12) is required of all students in regular attendance at the session. This entitles one to admission to regular courses and to all special lectures. An extra laboratory fee is charged in some courses for materials used. Any single course may be taken for a fee of six dollars (\$6) and the laboratory fee, if there be any in connection with the course taken, a single course being understood to mean not more than two and a half hours. For further information address Thomas Arkle Clark, Director, or W. L. Pillsbury, Registrar, Urbana, Illinois.

SPECIAL LECTURES

Courses of special lectures will be given by Deans David Kinley and Stephen A. Forbes, of the University; Professor

Nathaniel Butler, of the University of Chicago; Professor Arlo Bates, of Massachusetts Institute of Technology; Professor Frank M. McMurry, of Columbia University, and Professor Lindsay Todd Damon, of Brown University.

BOTANY

Assistant Professor HOTTES, Mr. BALLARD

S E 1. ELEMENTARY COURSE. *Daily; two periods; (2½).* Assistant Professor HOTTES and Mr. BALLARD.

S 2. PLANT ANATOMY AND PHYSIOLOGY.—A study of cells and tissues and their development into organs, and experimental studies of living plants in action. Lectures and laboratory work. *Daily; two periods; (2½).* Assistant Professor HOTTES and Mr. BALLARD.
Required; S E 1, or its equivalent.

S 3. ADVANCED WORK.—Provision will be made for those who are capable of pursuing by laboratory methods studies of an advanced grade. *Daily; two periods; (2½).* Assistant Professor HOTTES.

CHEMISTRY

Mr. SAMMIS, Mr. CLARK, Miss FLATHER

S E 1. ELEMENTARY CHEMISTRY.—A course in general elementary chemistry, consisting chiefly of recitations and laboratory work. Five semester hours in this subject will be accepted for Chemistry I of the regular University curriculum. Any credits made in this course may be applied in fulfilling the requirements for admission to the University. Richter's Inorganic Chemistry. *Daily; two or four periods; (2½ or 5).* MR. SAMMIS, MR. CLARK and Miss FLATHER.

S 2. ADVANCED COURSE FOR TEACHERS.—This course is especially adapted to the needs of teachers of elementary chemistry, and such selection and modification of the work will be made as may best suit the purpose of the individual teacher. This course is open to teachers of chemistry only, and to those only by special arrangement with the instructor. *Daily; two periods; (2½).* MR. SAMMIS.

S 3. QUALITATIVE ANALYSIS.—A course consisting mainly of laboratory work, but also including lectures and recitations. This course may be taken for credits amounting to two and one-half or five semester hours, and such credits will be accepted for the regular University courses known as Chemistry 3b, and Chemistry 3a. *Daily; two or four periods; (3 or 5).* Mr. SAMMIS, Mr. CLARK and Miss FLATHER.

DRAWING, GENERAL ENGINEERING

Mr. MOORE, Mr. PONZER

For description of these courses, see page 223.

ECONOMICS

Professor KINLEY, Assistant Professor WESTON

S 1. PRINCIPLES OF ECONOMICS.—A discussion of the principles with such illustrative applications as are necessary to make them clear. *First six weeks; daily; (2).* Professor KINLEY.

S 2. ECONOMIC HISTORY OF THE UNITED STATES.—This course is an inquiry into the trend of our development as a nation, and into the physical, economic, and, incidentally, the political, forces which have directed and controlled it. *First six weeks; daily; (2).* Professor KINLEY.

S 3. COMMERCIAL GEOGRAPHY.—A brief study of the effects of geographical conditions upon commercial and industrial development, followed by a somewhat detailed consideration of the more important products and industries and the domestic and foreign commerce of the United States. *Two to four times a week; (1 or 2).* Assistant Professor WESTON.

S 4. MONETARY AND BANKING PROBLEMS.—This is a course of lectures on practical monetary and banking problems. *Five times a week; (2).* Assistant Professor WESTON.

S 5. COMMERCIAL WORK IN HIGH SCHOOLS.—This is a course of five lectures, open to all members of the summer school, but intended principally for teachers in charge of commercial courses in high schools. The topics to be discussed in the five lectures are as follows: (1) History and general character of commercial education; (2) Relation of commercial education to so-called liberal education; (3) What should be the scope and purpose of high school courses in commerce; (4) The curriculum; (5) The relation of high school commercial courses to university courses in commerce and industry. Professor KINLEY.

EDUCATION

Professor DEXTER, Associate Professor COLVIN, The High School Visitor, Assistant Professor HOLLISTER.

S 1. THE SCIENCE OF EDUCATION.—This is an elementary course covering the field of organized educational effort. *Daily*; ($2\frac{1}{2}$). Professor DEXTER.

S 2. GENERAL METHOD.—This course is an application of the principles of education to the art of teaching. Emphasis will be placed on the psychological facts which lie at the basis of educational theories and practice, particularly in reference to the high school. The ground work of the systems of Herbart and Froebel will be reviewed. *Twice a week*; (1). Associate Professor COLVIN.

S 3. SCHOOL ORGANIZATION AND ADMINISTRATION.—A general course, including a brief historical discussion of the principles and laws under which Illinois schools are developing; present legal status of schools; school finances, material equipment; problems in organization; the course of study and the daily program. Comparative studies, especially in relation to supervision, finance, qualification and certification of teachers, etc. *Daily*; ($2\frac{1}{2}$). The High School Visitor, Assistant Professor HOLLISTER.

S 4. SECONDARY SCHOOL MANAGEMENT.—Legal status of the high school; the high school as related to the community life and as a school of preparation; problems of the curriculum; the business side of high school work; discipline; social problems of the high school; the selection of teachers, text-books, apparatus, library books, etc. *Daily*; ($2\frac{1}{2}$). The High School Visitor, Assistant Professor HOLLISTER.

S 5. CONTEMPORARY EDUCATIONAL CONDITIONS AND MOVEMENTS IN THE UNITED STATES.—The educational tendencies of to-day. Besides the broader meaning of the whole movement, the school systems of our larger cities and towns are carefully studied. *Three times a week*; ($1\frac{1}{2}$). Professor DEXTER.

S 6. A COMPARATIVE STUDY OF THE SECONDARY SCHOOLS OF FRANCE, GERMANY, ENGLAND, AND AMERICA.—See page 231.

S 7. SPECIAL METHODS IN LANGUAGE AND HISTORY FOR HIGH SCHOOLS.—See page 232.

ENGLISH LITERATURE

Professor DODGE, Miss PILLSBURY, Mr. SCOTT

S 30. SHAKESPEARE.—The subject is approached from the point of view of characterization, technical, constructive and linguistic difficulties. The following plays will be read: A Midsummer Night's Dream, Romeo and Juliet, Henry V, Twelfth Night, Hamlet, King Lear. The globe edition will be used. Lectures, recitations and reports. *Daily; (2½)*. Professor DODGE.

S 5. NINETEENTH CENTURY CRITICISM.—Coleridge, DeQuincey, Carlyle, Matthew Arnold. Lectures, recitations, and reports. *Daily; (2 1-2)*. Mr. SCOTT.

S 6. AMERICAN LITERATURE.—*Four times a week; (2)*. Miss PILLSBURY.

S 8. HIGH SCHOOL ENGLISH.—The books required for entrance to the University in English literature are studied with reference to their use in the schoolroom. *Three times a week; (1½)*. Miss PILLSBURY.

S 9. THE ENGLISH NOVEL.—The development of English prose fiction in the nineteenth century is traced through the works of some of the leading authors. *Four times a week; (2)*. Miss PILLSBURY.

S 12. OLD ENGLISH (ANGLO SAXON).—The elements of the grammar are studied. Prose extracts, and *The Battle of Maldon* are read. *Daily; (2½)*. Professor DODGE.

S 13. THE FORMS OF POETRY.—The principal types of verse form will be studied with special reference to the preparation of the high school teacher of English. *Twice a week; (1)*. Mr. SCOTT.

103. RESEARCH COURSE IN NINETEENTH CENTURY ENGLISH LITERATURE.—Intended primarily for those preparing theses for the master's degree, but open to others having proper preparation. *Twice a week; (1 to 3)*. Professor DODGE.

GERMAN

DR. DAVIS

S 1. BEGINNERS' COURSE.—Special attention given to pronunciation and to practice in speaking. *Daily; (2½)*.

S 2. EASY NARRATIVE PROSE.—Reading of texts and work in syntax. *Four times a week; (2)*.

S 3. SUPPLEMENTARY COURSE.—This course is for independent work under the direction of the instructor. Competent students may

thus supplement course S 1, so as to make it the equivalent of course 1 of the University year, or they may supplement course S 2 so as to make it the equivalent of course 3 of the University year. Independent work of a more advanced character may also be done under this course. ($1\frac{1}{2}$ or 2).

GOVERNMENT, SCIENCE OF

Assistant Professor WESTON

S 1. CIVIL GOVERNMENT OF THE UNITED STATES.—The course includes a study of national, state, and local institutions, and is specially adapted to the needs of those expecting to teach civil government in the schools. *Three to five times a week; (2 to 3).*

HISTORY

Professor RAMMELKAMP, Mr. ALVORD

S 1. THE HISTORY OF ROME.—This is an introductory course covering the field of Roman history. Especial emphasis will be laid on the internal development of the Roman state, the external expansion being studied only in so far as it led to readjustments within the social structure and the constitution. *Daily; (2½).* MR. ALVORD.

S 2. THE HISTORY OF THE PROTESTANT REVOLUTION, 1517-1555.—This course is designed for more advanced students of European history. Students will be expected to make a free use of the Library, and to familiarize themselves with the best secondary authorities on the period. *Daily; (2½).* MR. ALVORD.

S 3. THE HISTORY OF THE UNITED STATES, 1789-1860.—A general history of the period from the beginning of the national government to the outbreak of the Civil War. The course will be conducted with special reference to the interests of teachers of American history. *Daily; (2½).* Professor RAMMELKAMP.

S 4. INDEPENDENCE AND NATIONALITY, 1765-1789.—A history of the Revolution, the Confederation, and the movement for a federal constitution. A course designed for students with some knowledge of the proper methods of historical study and investigation. *Daily; (2½).* Professor RAMMELKAMP.

LATIN

Professor BARTON

S E 1. COURSE FOR BEGINNERS.—This course furnishes either a rapid review for those who have studied Latin, or offers an oppor-

tunity for beginning the study of the language. The most important portions of a preparatory Latin book will be covered. *Daily; (2 1-2)*.

S 2. READING COURSE.—Such authors will be read as best meet the needs of the class. It is probable that Cæsar and Cicero will be the authors selected. *Daily; (2½)*.

S 3. TACITUS.—This course is offered for those who are familiar with the Latin authors usually read in the high schools of our state, but who desire to secure an acquaintance with a larger body of Latin literature. The *Germania*, or *Agricola* of Tacitus will probably be selected. If, however, it is the desire of the class, other University offerings may be substituted, as Horace, Livy, or Pliny's letters. *Three times a week; (1½)*.

S 4. TEACHERS' COURSE.—The Latin language; its characteristics; methods and purposes of study; value as discipline, as literature, as an introduction to Roman life and ideas; the teacher's preparation; lists of books, photographs, lantern slides, and stereopticon views as aids in instruction. *Twice a week; (1)*.

MANUAL TRAINING

Mr. CURTISS, Mr. BACON

S 1. THEORY AND PRACTICE OF MANUAL TRAINING.—Lectures, discussions and collateral reading.

(a). Manual Training as a Factor in Education. The relation of the school and social life.

(b). The Relation of Manual Training to the Curriculum. The psychology of manual training, its relation to the child and to the other subjects of the school, correlation.

(c). History of the Development of Manual Training in this Country, including the relation of manual training to technical or trade training.

(d). A Study of the Practice of Manual Training in this Country. Courses and methods studied in elementary and high school work.

(e). The Method of Recitation. The development of the lesson plan.

(f). Organization and Supervision of Manual Training. *First six weeks; daily.* Mr. BACON.

S 2. MANUAL TRAINING FOR ELEMENTARY SCHOOLS.—A course in practical work, including paper and cardboard work, raffia and

reed work, elementary metal work and wood work, practicable for pupils in the first six years of the elementary school. *First six weeks; daily.* Mr. BACON.

S 3. MANUAL TRAINING FOR HIGH SCHOOLS.—An advanced course in practical work for the first years of the high school. A special study is made of the problems of decoration and constructive design. Mechanical drawing and wood carving will be studied in definite relation to the work. Talks are given on the structure and texture of woods, finishes and preservatives, forestry, etc. This course is especially designed for high schools in which machinery and a power equipment is impracticable, but it may also be used to advantage in schools more fortunately equipped. *First six weeks; daily.* Mr. BACON.

S 4. WOOD SHOP.—The work as far as possible is carried along the same lines as in our leading commercial shops. *Two to three hours daily; (2 to 3).* Mr. CURTISS.

MATHEMATICS

Assistant Professor RIETZ, Dr. COAR, Mr. PONZER, Mr. LYTLE

S E 1. ELEMENTARY ALGEBRA.—This course covers the regular work in Algebra preparatory to college, but is presented with special reference to the needs of high school teachers of algebra. *Daily; (2½).* Mr. LYTLE.

S 2. ADVANCED ALGEBRA.—This course is the equivalent of that offered in the University on the same subject. See p. 265. *Daily; (3).* Assistant Professor RIETZ.

S E 3. PLANE GEOMETRY.—The work of this course is preparatory to college. *Daily; (3).* Mr. LYTLE.

S 4. SOLID GEOMETRY.—*Daily; (3).* Assistant Professor RIETZ.

S 5. ANALYTICAL GEOMETRY.—Tanner and Allen's Analytical Geometry. *Daily; (2½).* Dr. COAR.

S 6. DIFFERENTIAL CALCULUS.—*Daily; (2½).* Mr. PONZER.

S 7. INTEGRAL CALCULUS.—*Daily; (2½).* Dr. COAR.

S 8. PLANE TRIGONOMETRY.—*Daily; (2).* Mr. PONZER.

S 16.—DIFFERENTIAL EQUATIONS.—For students of engineering, of mathematics, and astronomy. *Daily; (3).* Assistant Professor RIETZ.

MECHANICS, THEORETICAL AND APPLIED

Mr. MOORE

S 7. ANALYTICAL MECHANICS.—This course includes the first portion of analytical mechanics as given in Maurer's Technical Mechanics. *Daily; (3).*

PHYSICAL TRAINING

Mr. HANA

S 1. GYMNASIUM PRACTICE.—Practical elementary class' exercises with hand apparatus, and elementary heavy work. *Two periods a week.*

S 2. GYMNASIUM PRACTICE.—Fencing, wrestling, and intermediate and advanced heavy apparatus work. *Two periods a week.*

S 3. LECTURE.—Personal hygiene. *Once a week.*

S 4. SWIMMING.—The large pool in the Gymnasium Building offers ample facilities for swimming, and instruction in this branch will be given at regular periods.

PHYSICS

Assistant Professor WATSON, Mr. SLUSS

S E 1 (a). GENERAL PHYSICS.—Lectures with experimental illustrations and recitations. The topics treated in the summer of 1905 will be mechanics, electricity and magnetism. This course when taken in connection with S E 1 (b), will be accepted as credit for the corresponding topics in Physics 2 (a) and 2 (b). (See page 289). *Daily; (2½).* Assistant Professor WATSON.

Required: Plane geometry, and high school algebra.

S E 1 (b). GENERAL PHYSICS LABORATORY.—A laboratory course in mechanics, electricity and magnetism to accompany S E 1 (a). *Daily; (1½).* Assistant Professor WATSON, Mr. SLUSS.

Required: Plane geometry, and high school algebra.

S 3. PHYSICAL MEASUREMENTS.—A course of physical measurements equivalent to Physics 3. (See page 289.) This work is open to students having taken Physics 1, or its equivalent. (See page 289.) Assistant Professor WATSON, Mr. SLUSS.

S E 4. TEACHERS' COURSE.—Selected work to suit needs of teachers. The course will include two types of work: 1. Manipulation with glass and metals, including construction of simple apparatus; 2. Discussion of such topics as text-books, note-books, appa-

ratus, catalogs, etc. The course is open to teachers, or prospective teachers, who have a knowledge of general physics. Assistant Professor WATSON.

PHYSIOGRAPHY

Mr. Fox

S 1. ELEMENTS OF PHYSICAL GEOGRAPHY.—A laboratory course in physical geography. Gilbert and Bingham's Introduction will be used as a text, and selected topics taken from it will be made the basis of the term's work. *Daily; (2½).*

S 2. TEACHERS' COURSE IN PHYSICAL GEOGRAPHY.—This course is designed primarily for those who expect to teach. *Daily; (2½).*

Required: An approved course in elementary physical geography, or Geology 8, as described in the catalog of the University.

PSYCHOLOGY

Associate Professor COLVIN

S 1. INTRODUCTION TO PSYCHOLOGY.—This course is intended for beginners, and aims to cover the entire field with a view of furnishing a basis for further study in psychology, education, and philosophy. *Daily; (2½).*

S 2. CHILD STUDY.—It is the plan of this course to take up in their natural order, the various developmental stages of the human mind from the earliest days of infancy. *Three times a week; (1½).*

RHETORIC

Professor CLARK, Mr. SCOTT

S 2. RHETORIC AND THEMES.—The work in this course will be similar to the work in English composition required for freshmen in the University. *Daily (3).* Professor CLARK.

S 3. DAILY THEMES.—Short Themes, from one to two pages in length, every day, with exercises not to exceed four pages in length every fortnight. Bates' Talks on Writing English. (Second series.) *Three meetings a week; (3).* Professor CLARK.

S 4. ENGLISH COMPOSITION AND LITERATURE.—The study of rhetorical principles as seen in literary masterpieces. The reading and analysis of the essays of Stevenson, Macaulay and Carlyle.

Two three page themes a week, and one long exercise. *Four meetings a week; (3)*. Mr. SCOTT.

S 5. THEME CORRECTING.—A course primarily for teachers of English composition. Lectures, discussions, and written exercises. The actual work of students in the high schools of the state will be utilized in this course. *Two hours a week; (1)*. Professor CLARK.

ZOOLOGY

Doctor PETERS and an assistant

S E 1. ELEMENTARY ZOOLOGY.—This course will apply to the ecological, morphological, and physiological methods of study of vertebrate and invertebrate animals. Students desiring University credit for either Zoölogy 10 or Zoölogy 2 may arrange to take the required additional hours of laboratory work, and a prescribed course of related reading. *Daily; (2½)*.

S 2. TEACHER'S COURSE.—This is a course of selected matter in pedagogy, technique, field work, and physiology, as applied to zoölogy. It is intended to meet the practical needs and remedy the common deficiencies, of both teachers and prospective teachers, who have an elementary knowledge of zoölogy, but who have not specially studied its teaching aspect. Those whose knowledge of the subject matter of zoölogy is deficient should take courses S E 1 along with this course. The laboratory work of different students need not be uniform, but may be adapted to the needs of the individual. *Daily; (2½)*.

S 3. EXPERIMENTAL AND PHYSIOLOGICAL ZOOLOGY.—The primary aim of this course is to train teachers and advanced students in the method of experiment as applied to zoological objects. *Daily, (2½)*.

GENERAL DESCRIPTION OF COURSES

Following the description of each course of instruction will be found the necessary requirements, if any, for admission to that particular course. Careful attention must be given to these requirements and to the sequence of studies thus indicated. For instance, under Architecture 4, for students of the College of Engineering, page 195, there are required "Physics 2a and 2b," and "Architecture 2 and 3." Turning now to these subjects, it is found that physics 1 and 3 are the major course of one year, architecture 2 is wood construction, and architecture 3 is metal construction. All these subjects must be satisfactorily passed before admission may be had to the class in architecture 4.

In case a course not required for graduation is selected by less than five students, the right to withdraw the same for the semester is reserved.

Graduate courses of instruction are described under the various subjects, as a rule after the undergraduate courses. They are numbered upward from 100. Other courses may often be arranged by the professors in charge to meet the special requirements of students.

Credit is reckoned in semester "hours," or simply "hours." An "hour" is either one class period a week for one semester, each class period presupposing two hours' preparation by the student, or the equivalent in laboratory, shop, or drawing room.

The semester, the days, and the class period or periods during which each course is given, and the number of "hours" per semester for which the course counts, are

shown after each course, as follows: The semester is indicated by the Roman numerals I., II.; the days by the initial letters of the days of the week; the class period or periods (of which there are nine each day, numbered consecutively from one to nine), by Arabic figures; and the "hours" or amount of credit, by Arabic figures in parenthesis. For example, after the description of Astronomy 5 occur the abbreviations I.; M., W., F.; 6; (3). These are to be read first semester, Monday, Wednesday, and Friday, sixth period, three "hours."

AGRONOMY

Professor HOPKINS, Professor DAVENPORT, Assistant Professor MOSIER, Mr. CRANE, Mr. PETTIT, Mr. WILLIS, Mr. HUME, Mr. RANKIN.

1. DRAINAGE AND IRRIGATION.—Location of drains and irrigation conduits, leveling, digging, laying tile and pipes, filling, and subsequent care; cost of construction and efficiency; sewers for the disposal of waste water from farm buildings and the sewage from kitchen and toilet; farm water pipes, pipe and thread cutting. Class work, laboratory and field practice. *I., first half; daily; 3, 4; or II., second half; daily; 3, 4; (2½).* MR. CRANE.

2. FIELD MACHINERY.—The tools and machinery of the field,—plows, harrows, and hoes; seeders, drills, corn and potato planters; cultivators, weeders and spraying machines; mowers, rakes, self-binders, corn harvesters and huskers, potato diggers, wagons, etc. Class work and laboratory practice, including setting up and testing machines, noting construction and elements necessary for successful work. *I., first half; daily; 1, 2; or II., second half; daily; 1, 2; (2½).* MR. CRANE.

3. FARM POWER MACHINERY.—Horse-powers, gas engines, traction engines, windmills, pumps, corn shellers, feed cutters, grinders, and threshing machines,—their construction, efficiency, durability, and care. Class room and laboratory work. *I., second half; daily; 6, 7; (2½).* MR. CRANE.

4. FARM BUILDINGS, FENCES, AND ROADS.—The arrangement, design, construction, and cost of farm buildings, especially of barns, granaries, and silos; the different kinds of fences, their cost, construction, efficiency, and durability; cost and construction of roads

and walks. Class work and practice in designing and drafting buildings, operating fence-building machines, setting and testing fence posts, making walks, etc. *II., daily; 6, 7; (5).* Mr. CRANE.

5. SEEDS.—Quality and Preservation. Judging of corn, oats, wheat, etc., and a study of market grades of farm crops; shrinkage of grain and care of stored crops to prevent injury and loss. Class and laboratory work. *I., first half; daily; section A, 1, 2; section B, 6, 7; (2½).* Mr. HUME.

6. SEEDS.—Germination and Growth. Vitality and germination of seeds, preservation of seeds, methods of seeding; conditions of plant growth; peculiarities of the different agricultural plants in respect to structure, habits, and requirements for successful growth; enemies to plant growth,—weeds and weed seeds, their identification and methods of destruction, fungous diseases, such as smut of oats and wheat, and blight, scab, and rot of potatoes, methods of prevention; insects injurious to farm crops and how to combat them. Class room, laboratory, and field work. *II., first half; daily; section A, 1, 2; section B, 6, 7; (2½).* Mr. HUME.

7. SPECIAL CROPS.—A special study of farm crops. Rotation or succession of crops with special reference to systematic farming and economic distribution of labor, methods of culture, cost of production, consumption of products and residues or by-products. Class work supplemented by laboratory work and a study of the results of previous experiments; special reference to Illinois conditions. *I., daily; 3, 4; (5).* Mr. HUME.

Required: Agronomy 6.

8. FIELD EXPERIMENTS.—Special work by the students, conducted in the field. This work consists in testing varieties of corn, oats, wheat, potatoes, and other farm crops; methods of planting corn, seeding grains, grasses, and other forage crops; culture of corn, potatoes, and sugar beets; practice in treating oats and wheat for smut, and potatoes for scab, and studying the effects upon the crops; combating chinch bugs and other injurious insects. Other practical experiments may be arranged with the instructor. *II., and summer vacation; arrange time; (2½-5).* Mr. HUME.

Required: Agronomy 7, 12.

9. SOIL PHYSICS AND MANAGEMENT.—This course is designed better to prepare the student to understand the effects of the different methods of treatment of soils and the influence of these methods upon moisture, texture, æration, fertility, and production. It com-

prises a review of the origin of soils and the various methods of soil formation; a study of their mechanical composition and classification; of soil moisture and means for conserving it; of soil texture as affecting capillarity, osmosis, diffusion, and as affected by plowing, harrowing, cultivating, rolling, and cropping; of the wasting of soils by washing; fall or spring plowing and drainage as affecting moisture, temperatures, and root development. The work of the class room is supplemented by laboratory work, comprising the determination of such questions as real and apparent specific gravity, water holding capacity and capillary power of various soils; also the study of the physical effects of different systems of rotation and of continuous cropping with various crops, and the mechanical analysis of soils. *I.*; *daily*; *Section A, 1, 2; Section B, 3, 4; (5)*. Assistant Professor MOSIER and Mr. WILLIS.

Required: Chemistry 1, or two credits in entrance Physics.

10. SPECIAL WORK IN SOIL PHYSICS.—This course is intended for students wishing to make a further study of the physical properties of special soils, including the mechanical analysis of such soils by the means of centrifugal or centrifugal elutriator method. It also includes a study in the field of the effects of disking, harrowing, and rolling, time and depth of cultivation, with special reference to soil moisture and temperature. This work will be supplemented by a study of experiments that have been conducted along these lines. *I or II. Arrange time; (2-5)*. Assistant Professor MOSIER.

Required: Agronomy 9.

12. SOIL FERTILITY, FERTILIZERS, ROTATIONS.—The influence of fertility, natural or supplied, upon the yield of various crops; the effect of different crops upon the soil and upon succeeding crops; different rotations and the ultimate effect of different systems of farming upon the fertility and productive capacity of soils. The above will be supplemented by a laboratory study of manures and fertilizers, their composition and their agricultural and commercial value; of soils cropped continuously with different crops and with a series of crops; of the fertility of soils of different types, or classes from different sections of Illinois. *II., daily; 1, 2; (5)*. Professor HOPKINS and Mr. PETTIT.

Required: Chemistry 13a; Agronomy 6, 9.

13. INVESTIGATION OF THE FERTILITY OF SPECIAL SOILS.—This course is primarily designed to enable the student to study the fer-

tility of those special soils in which he may be particularly interested, and to become familiar with the correct principles and methods of such investigations. It will include the determination of the nature and quantity of the elements of fertility in the soils investigated, the effect upon various crops of different fertilizers added to the soils, as determined by pot cultures, and, where possible, by plot experiments. This work will be supplemented by a systematic study of the work of experiment stations and experimenters along these lines of investigations. *I., II.; arrange time, (2-5).* Professor HORKINS and Mr. PETTIT.

Required: Agronomy 12.

15. COMPARATIVE AGRICULTURE.—Reasons for the differences in the agriculture of different times, peoples, and countries, and why it is that the agriculture of a region or of a farm is a definite and individual problem, together with the need of harmonizing agricultural practice with natural conditions as well as with the findings of science. Circumstances that influence agricultural practice, as soil, climate, machinery, race, custom, land tenure, etc., and what is best under different conditions. Lectures; *II., F.; 4 (1).* Professor DAVENPORT.

Required: Two years' University work.

16. GERMAN AGRICULTURAL READINGS.—A study of the latest agricultural experiments and investigations published in the German language, special attention being given to soils and crops. The current numbers of German journals of agricultural science will be required and used as a text. This course is designed to give the student a broader knowledge of the recent advances in scientific agriculture, and, incidentally, it will aid him in making a practical application of a foreign language. It is recommended that it be taken after Agronomy 12. *II.; M., W.; 4; (2).* Professor HOPKINS.

Required: Two years' work in German.

17. FARM MACHINERY.—Expert work in Farm Machinery, chiefly with Harvesting Machinery and Gasoline Engines. This course is designed for students preparing themselves for experting these machines in the field. *II.; first half or second half; section A, 1, 2; section B, 3, 4; section C, 6, 7; (2½).*

Required: Agronomy 2.

18. INVESTIGATION AND THESIS.—This course varies in the subject matter of study, according to the department in which these are

Note.—For Plant Breeding, see Thremmatology 1.

written. The work is under the direction of the head of the department in which the work is done. *I., II.; arrange time; (5-10).*

19. FARMERS' INSTITUTE MANAGEMENT.—A study of the Farmers' Institute as a factor in our system of public education. This course is designed to set forth principles underlying the organization and conduct of Farmers' Institutes and agricultural associations and to systematize into definite lines the knowledge acquired in College to the end that the student may render more distinct service in institute and agricultural associations. Lectures; assigned readings and parliamentary practice. *II.; second half; M., W., 8; (1).* Mr. RANKIN.

COURSES FOR GRADUATES.

101. SYSTEMS OF SOIL INVESTIGATION; SOURCES OF ERROR AND METHODS OF CONTROL, INTERPRETATION OF RESULTS. Professor HOPKINS.

102. THE WORLD'S SUPPLY OF PLANT FOOD MATERIALS, INCLUDING METHODS OF UTILIZATION. Professor HOPKINS.

103. DIFFERENT SYSTEMS OF AGRICULTURAL PRACTICE AND THEIR ULTIMATE EFFECT UPON THE SOIL. Professor HOPKINS.

104. DRAINAGE WATERS; SURFACE AND SUB-DRAINAGE, WITH SPECIAL REFERENCE TO SOIL FERTILITY. Mr. PETTIT.

105. DETAILED STUDY OF SOIL INVESTIGATIONS IN PROGRESS IN ILLINOIS. Professor HOPKINS, Mr. PETTIT.

106. SOIL TYPES; METHODS OF SURVEYING AND MAPPING.—The work may include field practice. Assistant Professor MOSIER.

107. EROSION OF SOILS BY SURFACE WASHING AND METHODS OF PREVENTION. Assistant Professor MOSIER.

108. THE MECHANICAL COMPOSITION OF SOILS; ITS INFLUENCE UPON GRANULATION, ABSORPTION AND RETENTION OF MOISTURE, AND OTHER PHYSICAL PROPERTIES AFFECTING CROP PRODUCTION. Assistant Professor MOSIER.

109. EXPERIMENTATION IN THE PRODUCTION OF FIELD CROPS.—The work may include actual practice in planning and conducting field experiments. Mr. HUME.

110. WEEDS: ADVANCED STUDY AND INVESTIGATION RELATING TO THEIR DISTRIBUTION, IDENTIFICATION, AND METHODS OF ERADICATION, AND PREVENTION OF DISSEMINATION. Mr. HUME.

111. THE SELECTION OF SEEDS; METHODS OF DETERMINING QUALITY. Mr. HUME.

112. PLANT BREEDING, INCLUDING A DETAILED STUDY OF EXPERIMENTS AT THIS STATION, AND OF METHODS AND RESULTS REPORTED FROM OTHER STATES AND FROM FOREIGN COUNTRIES. Mr. SMITH.

113. MACHINE DESIGNING; ADVANCED STUDY OF FARM IMPLEMENTS WITH SPECIAL REFERENCE TO POSSIBLE IMPROVEMENTS. Mr. CRANE.

ANIMAL HUSBANDRY

Professor MUMFORD, Mr. HALL, Mr. OBRECHT, Mr. DIETRICH,
Mr. GOOD

I. SHEEP, MUTTON, AND WOOL.—The different grades of wool and their uses in manufactures, together with a critical examination of animals for mutton, wool, and breeding purposes. The development and characteristics of the several breeds; the most successful methods of flock-masters, and the production of mutton and wool for the markets of the world. Lectures, assigned readings, and extensive practice in judging. *II.; second half; daily; section A, 6; section B, 7, (2½).*

Required: Animal Husbandry 21 or 7.

2. SWINE.—This course includes a study of three phases of the swine industry as follows:

(a) A study of the market classes; prime heavy, butcher, packing, light hogs, and pigs, together with the various grades of the same. The value of each grade according to current market reports. Extensive practice in judging the above.

(b) Pork and bacon production from the standpoint of market requirements and the economy of production from the standpoint of the producer. The breeding, housing, care, and feeding of swine for breeding and for show purposes.

(c) Breeds of swine, origin, development, and characteristics together with extensive practice in judging.

Lectures and reference readings; daily; II.; section A, 1; section B, 2; (5). Mr. DIETRICH.

Required: Animal Husbandry 7 or 21.

4 and 5. MARKET CLASSES OF HORSES.—An outline of the market classes of horses, including draft horses, chunks, business, wagon and express horses, carriage horses, race and road horses, and saddle horses. A study of the conformation of the horse from the standpoint of market requirements. Exhaustive practice in judging;

lectures, and assigned readings. *II.; first half; daily; section A, 6; section B, 7; (2½).* Mr. OBRECHT.

7. PRINCIPLES OF ANIMAL NUTRITION.—The functional activities of the animal body and the end products of their metabolism. Foods are considered first chemically, as affording materials for the construction of the body tissues or of animal products, as meat, milk, wool, etc.; second, dynamically, as supplying the potential energy for the body processes and for external labor; third, as to the fertilizing value of their residues. *I.; first half; daily; 3; (2½).* Mr. DIETRICH.

Required: Chemistry 1, 3b, 4, 13; entrance Physics, or its equivalent, and one year of Botany or Zoölogy.

8. STOCK BREEDING.—(See Thremmatology 1).

9. INVESTIGATION AND THESIS.—Upon lines to be arranged with instructor for one or both semesters, according to nature of the subject. (5-10). Professor MUMFORD, Mr. HALL, Mr. OBRECHT, Mr. DIETRICH, Mr. GOOD.

10. MEAT.—The structure and composition of meats; quality, cost and food values of the various cuts of beef, mutton, and pork; breeding and feeding of the animal as affecting the value of the carcass and quality of the meat; farm and packing house methods of slaughtering, handling and curing meats; by-products of slaughter and their bearing upon the cost of meat. *I.; second half; daily; 1; (2½).* Mr. HALL.

11. MARKET CLASSES AND GRADES OF BEEF CATTLE.—An outline of the market classes and grades including the various grades of beef cattle, butcher stock, cutters and canners, stockers and feeders, and veal calves. A study of beef type from the standpoint of the butcher, the feeder and the breeder. The value of each grade according to current market reports. Exhaustive practice in judging, with lectures and assigned readings. *I.; first half; daily; section A, 6; section B, 7; or I.; second half; daily; 8; (2½).* Mr. HALL, Mr. GOOD.

12. BREEDS OF BEEF CATTLE.—The history, development, and characteristics of the breeds suitable for beef production. Tracing pedigrees and a critical study of the same. (This course is intended for students expecting to own or manage pure bred herds). Lectures, assigned readings, and exhaustive practice in judging. *I.; first half; lectures, M., Tu., W.; 8; laboratory or practical exercise in judging, Th., F., 8, and 2 hrs. additional labora-*

tory work per week for which arrange time; (2½). Professor MUMFORD, Mr. GOOD.

Required: Animal Husbandry 10 and 11.

13. BEEF PRODUCTION.—Methods and practices in breeding and feeding beef cattle for the open market. By-products of the feed lot and their bearing upon the cost of beef. It is recommended that this course should be taken after Animal Husbandry 10. Lectures, assigned readings, and a study of experimental work. *II.; first half; daily; 1; (2½).* Mr. HALL.

14. MANAGEMENT OF PURE-BRED HERDS OF BEEF CATTLE.—Like Animal Husbandry 12, this course is intended for students anticipating the management or ownership of registered herds. The breeding herd, and its housing, feed, and management. The selection and fitting of animals for sale and for the show ring. Disposal of surplus stock. Lectures and assigned readings. *I.; second half; daily; 6; Laboratory work four hours per week for which arrange time; (2½).* Professor MUMFORD, Mr. GOOD.

Required: Animal Husbandry 10, 11, 12, and 13.

15. DAIRY CATTLE.—(See Dairy Husbandry 2 and 3).

16. STABLE MANAGEMENT AND FEEDING OF HORSES.—Feeding and care of work horses and drivers at labor and at rest. Stables stable floors, fixtures, harness, vehicles, and other equipment, and their care. Lectures and assigned readings. *I.; first half; M., W., F.; 8; (1½).* Mr. OBRECHT.

Required: Animal Husbandry 21.

17. THE EDUCATION AND DRIVING OF THE HORSE.—A critical study of the mental qualities, peculiarities, and limitations of the horse together with the most successful methods of educating and training him for skillful work at labor or on the road. The rules and practices of correct driving, and responsibilities of the driver and the courtesies of the public highway. Lectures, readings, and practice. *II.; second half; daily; 6, 7; (2).* Mr. OBRECHT.

Required: Animal Husbandry 5 and three semesters' work in the University or its equivalent.

Only a limited number of students admitted to this course.

18. BREEDS OF LIGHT HORSES.—Their history, development, characteristics, and uses. Lectures and assigned readings. *I.; first half; M., W., F.; 4; (1½).* Mr. OBRECHT.

Required: Animal Husbandry 5 or its equivalent.

19. BREEDS OF DRAFT HORSES.—Their history, development, and

characteristics. Lectures, assigned readings, and judging. *I.; first half; Tu., Th.; 4; (1).* Mr. OBRECHT.

Required: Animal Husbandry 4 or its equivalent.

20. BREEDING, REARING, AND MANAGEMENT OF HORSES.—Selection of breeding stock, care and management of stallions, mares, and foals; breeding and the production of market horses; buying, selling, and showing. Lectures and assigned readings. *I.; first half; Tu., Th.; 8; (1).* Mr. OBRECHT.

21. ELEMENTARY STOCK FEEDING.—The animal body: its processes and requirements; the digestion and utilization of food, and conditions affecting the same. Feeding stuffs: their composition; their comparative values considered chemically, physiologically, and with reference to their fertilizing constituents. Feeding standards and the compounding of rations. Lectures, assigned readings, and recitations. *I.; first half; Tu., Th.; 6; or II.; first half; Tu., Th.; 6; (1).* Mr. DIETRICH.

22. ADVANCED STOCK JUDGING.—A study of animal conformation with reference to market and show yard form, quality, and condition. A course intended to render the student expert in his judgment in the selection of horses, beef cattle, sheep, and swine, for feed lot, market, and exhibition, and to qualify him as a competent judge at Live Stock Shows. *II.; daily; 9; (3).* Professor MUMFORD, Messrs. HALL, OBRECHT, DIETRICH, GOOD.

Required: Credits in Animal Husbandry 1, 2, 4, 5, 11, and 10 or 12 and three semesters' work in the University or its equivalent.

COURSES FOR GRADUATES

101. DEVELOPMENT OF TYPE IN DOMESTIC ANIMALS.—A study of the various factors and conditions involved in the development of type and characteristics in the breeds and strains of cattle, horses, sheep, and swine, and the bearing of these factors and conditions upon future improvement. Professor MUMFORD.

102. ANIMAL NUTRITION.—Advanced work in the principles of nutrition as bearing upon the feeding of animals. Special investigations at the Experiment Station, also special study of records of investigations and feeding experiments of the department with reference to problems of nutrition. Professor MUMFORD.

103. LIVE STOCK EXPERIMENTATION.—Objects, methods, and sources of error in experimental work dealing with the feeding, breeding, and management of farm animals. Detailed study of live stock experiments in progress at this Station, and a survey of past

and present work in this line by the various experiment stations of the world. Professor MUMFORD.

ANTHROPOLOGY

Professor DANIELS.

1. ETHNOGRAPHY.—The physical and psychical elements of ethnography. Origin, characteristics, and subdivisions of races and peoples. Lines of migration and national intercourse. *I.*; *W.*, *F.*; 7; (2). Professor DANIELS. [Not given in 1905-1906.]

Required: A major or minor course in economics, geology, psychology, or zoölogy.

2. ETHNOLOGY.—A comparative study of customs, ceremonies, rites, and folk-lore, of primitive peoples. Special attention is given to the study of primitive religious ideas with reference to their relation to the various civilizations, and also to the psychic nature of man. *II.*; *Tu.*, *Th.*; 1; (2). Professor DANIELS. [Not given in 1905-1906.]

Required: Two years of University work.

ARCHITECTURE

Professors RICKER, WHITE, WELLS; Mr. CLARK, Mr. DAVISON.

2. WOOD CONSTRUCTION.—Formulæ and data for computing dimensions and strength of columns, beams, girders, etc., of wood or metal, are given and applied in the solution of examples. Wood and its uses in construction and decoration, seasoning, shrinkage, defects, and modes of protection from decay. Construction and design of wooden floors, walls, ceilings, and roofs, and joinery, doors, windows, bays, inside finish, cornices, wainscoting, stairs, etc. *Kidder's Building Construction and Superintendence; Part II.*, *I.*; *W.*, *F.*; 6, 7, 8; (3). Mr. CLARK.

Required: General Engineering Drawing 1, 2.

3. MASONRY AND METAL CONSTRUCTION.—Foundations of stone, brick, concrete, and piles; materials employed in stone masonry, their uses, defects, qualities, and modes of preparation. Kinds of masonry and external finish. Tools for stone cutting and their use. Preparation of working drawings, with application to the arch, vault, and dome. Brick masonry, its materials and bonds, manufacture and refining of cast iron, wrought iron, and steel, with processes of pattern-making, molding, casting, refining, rolling, etc., and standard dimensions or sections. Special properties

and value of metal in a structure, designing a line of columns in mercantile building, and of beams, girders, and footings, together with the study of joints and connections. *Kidder's Building Construction and Superintendence; Part I. II.; Tu., Th.; 6, 7, 8; (3).* Mr. CLARK.

Required: General Engineering Drawing 1, 2.

4. SANITARY CONSTRUCTION.—Recitations and lectures, designs for special problems. Study of plumbing, trap ventilation, removal of wastes, construction of water closets, drains, and systems of water supply; sewage disposal. Water supply and fixtures in dwellings. *Lectures on sewage Disposal. I.; F.; 4; (1).* Mr. CLARK.

Required: Physics 2a, 2b; Arch. 2, 3.

5. GRAPHIC STATICS AND ROOFS.—Elements of graphic statics and applications in designing trussed roofs. Forces, equilibrium, reactions, moments, bending moments, and shears on beams; center of gravity, moment of inertia and kern of cross sections. Construction of wooden and metallic roofs, mode of computing loads on roof trusses, obtaining end reactions, drawing strain diagrams, and determining sectional dimensions of members, with the designing of joint connections. *Sondericker's Graphic Statics. II.; M., W.; 1, 2; F. I, 2, 3.* Mr. CLARK.

Required: Math. 2, 4, 6; Theoretical and Applied Mechanics 1, 2 or 4, 5.

6. HISTORY OF ARCHITECTURE.—Continues through the year and is taken with architecture 7 and 11. Commencing with Egyptian and ending with modern styles, a careful study is made of the more important styles, examining historical conditions, local and inherited influences, structural materials and system, special ornaments, purposes and designs of the buildings, with the most important typical examples of each style. Especial attention given to ideas useful or suggestive in American work, and to tracing gradual evolution of architectural forms. One recitation and two illustrated lectures a week. References made to Fergusson, Lubke, Durm, Reber, Choisy, Hamlin, etc. *Fletcher's History of Architecture, 5th Edit. I.; M., Tu., W., Th.; 3; II.; M., Tu., W., Th.; 4; (4).* Professor RICKER.

7. HISTORIC ORNAMENT.—A study of the most important details of the Grecian, Roman, Early Christian, Byzantine, Mohammedan, Romanesque, Gothic, and Renaissance styles. Lectures and drawing. *II.; Tu., Th.; 1, 2, 3; (2).* Professor WELLS.

Required: Architecture 2, 3, 8.

8. THE ORDERS OF ARCHITECTURE.—A study of the Five Orders of Architecture, and architectural Shades and Shadows and of the proportions and details of the Orders by means of lectures, recitations, blackboard sketches from memory, and problems requiring the use of Orders. *Ware's American Vignola; Lectures on Shades and Shadows.* II.; lecture, Th.; 2; drawing, M., W., F.; 1, 2; (3). Mr. DAVISON.

Required: Gen. Eng'g Drawing 1; Architecture 20 or 21.

9. MONTHLY PROBLEMS.—An entire day in each month during the second, third, and fourth years is devoted to a problem in design. The program is made known at beginning of the exercise, and sketches must be completed and rendered during the same day. Credit is given for this study only after the completion of each year. I., II.; first Tu. in each month, all day; ($\frac{1}{2}$ for each semester). Mr. DAVISON and Professor WELLS.

Required: General Engineering Drawing 1, 2.

10. WORKING DRAWINGS.—Conventional methods for representing the different parts of buildings in general and in detail, conventional colors and sectioning; systems of lettering and figuring drawings; working drawings; tracing; drawing for reproduction. II.; M; 6, 7, 8; (1). Mr. CLARK.

Required: Architecture 2, 3.

11. ARCHITECTURAL SEMINARY.—Reports and discussions of original investigations of assigned topics in History of Architecture; reviews of books, abstracts of current technical journals, and other publications. I.; F.; 3; II.; F.; 4; (1). Professor RICKER.

12. SUPERINTENDENCE, ESTIMATES, AND SPECIFICATIONS.—This study comprises several specialties not otherwise provided for, so far as they can be taught in a professional school. The subjects treated include the duties of a superintendent, his relations to architect, owner, and contractor, the method of supervising work, systems of keeping building accounts, the usual methods of measurement of materials and work, arrangement of computations in proper and convenient order, and approximate prices of material and labor, which vary in different localities. The methods of estimating by squaring, cubing, units, and quantities are each employed and illustrated by problems. A study is made of the general and special clauses of specifications and of their arrangement, as well as of methods of classifying material to facilitate writing specifications. Practice is obtained by writing several sets. *Clark's Superintend-*

ence; *Bower's Specifications*, I.; M., W., F.; 4; (3). Professor WHITE.

Required: Architecture 2, 3, 4.

13. HEATING AND VENTILATION.—Scientific theory and practice of warming and ventilating buildings is the object of this study. Commencing with fuels and production of heat, then passing to flow of gases through ajutages and pipes, applying these data to calculations of dimensions of air ducts and chimneys. Different systems of heating by furnaces, hot water, steam, etc., are next examined, with details of each. Sources of impurity in the air and requirements of good ventilation are then considered, with the different methods of ventilation by aspiration, by fans, etc., ending with the study of fans of different types. Numerous problems are given, and heating plants designed. *Carpenter's Heating and Ventilating Buildings*; *Ricker's Notes on Heating and Ventilation*. I.; M., W., Th., F.; 1; (4). Professor WHITE.

Required: Architecture 2, 3, 4, 15; Physics 2a, 2b.

14. ARCHITECTURAL PERSPECTIVE.—Theory of perspective is taught with labor-saving methods of abbreviating work, and designing in perspective is made a special aim. Problems in angular, parallel, vertical, and curvilinear perspective, as well as in perspective shades and shadows, are solved. *Ware's Modern Perspective*. I.; drawing, Th.; 6, 7, 8; lecture, Th.; 2; (2). Mr. CLARK and Mr. DAVISON.

Required: General Engineering Drawing 1, 2.

15. REQUIREMENTS AND PLANNING OF BUILDINGS.—A study of the requirements which must be considered to successfully plan schools, churches, libraries, theatres, hospitals, and other usual types of buildings. Numerous problems in planning are given. II.; lecture, F.; 2; drawing, M., W., T.; 1, 2, or 2, 3; (3). Professor WHITE.

Required: General Engineering Drawing 1, 2; Architecture 2.

16. RESIDENCE DESIGN.—Practice in design and study of the requirements for dwellings. The work is limited to residences, since this class of buildings is likely to afford the graduate his first opportunity for independent original work. Lectures and drawings. II.; *Elective*, W., 3; drawing, F.; 6, 7, 8; (2). Mr. DAVISON.

Required: Architecture 2, 3, 8.

17. ARCHITECTURAL DESIGNING.—Simple problems in design are solved by sketch plans, elevations, and selections, rendered as required. The object is to obtain as much practice in design as possi-

ble, and the course serves as an introduction to senior work in design. *II.*; *Tu., W., Th.*; 6, 7, 8; (3). Mr. DAVISON.

Required: Architecture 6, 7, 8, 9, 11, 20, or 21.

18. ARCHITECTURAL COMPOSITION.—A careful study is made of the laws of architectural design and of the results of experience. Commences with general principles, passing to an examination of proportions employed in most important styles, arrangement of plan, external design in general detail, ceilings, and interior arrangement of corridors, stairways, and entrances, of internal courts, and of halls for large assemblages. Frequent problems in design afford practical application of the principles *I*; *lecture Tu., 1*; *drawing, M., W., F.*; 1, 2; (3). Mr. DAVISON.

Required: Architecture 6, 7, 11, 17, 20 or 21.

19. ARCHITECTURAL ENGINEERING.—This continues the study of graphic statics, commenced in "Graphic Statics and Roofs," with application to metallic roofs of wide span, roof trusses of curved or unusual form, and those supported by abutments and jointed. Spherical and conical trussed domes. Effect of moving loads on girders, the graphical analysis of the arch, vault, and dome, and of the Gothic system of vault and buttress. Construction and details of steel skeleton buildings. Practical applications are made to a series of problems in design for specified cases. *Freitag's Architectural Engineering*; *Ricker's Translation of Wittmann's Arch and Vault. I.*; *M., Tu., Th.*; 3; *II.*; *Tu., W., F.*; 4; (3). Professor WHITE.

Required: Math. 2, 4, 6, 7, 9; Theoretical and Applied Mechanics 1, 2; Architecture 2, 3, 5.

20. FREE HAND DRAWING.—Any courses offered in Art and Design amounting to three semester hours. Arrange hours. *I., II.*; *daily*; (3). Mr. LAKE.

22. RENAISSANCE DESIGN.—A study of Architectural Design applied to large problems. *I.*; *M., W., F.*; 6, 7, 8; (3). Mr. DAVISON.

Required: Architecture 17, 18.

23. MEDIAEVAL DESIGN.—A prescribed series of tracings of important details of Romanesque and Gothic architecture is made, and problems in construction and design are worked out as fully as time permits. *Ricker's Translation of "Redtenbacher's Leitfaden."* *I.*; *lecture, Th.*; 3; *drawing, Tu., Th.*; 6, 7, 8; (3). Mr. DAVISON.

Required: Architecture 6, 7, 11, 17, 18, 20.

25. DESIGN OF ORNAMENT.—The study of the design of archi-

tectural ornament to decorate the structural forms usually found in practice. These designs will be in charcoal or crayon at as large a scale as possible. *Lectures, Meyer's Hand-Book of Ornament. II.; Tu., W., Th.; 6, 7, 8; (3).* Professor WELLS.

Required: Architecture 6, 7, 11, 17, 18, 20.

27. DOMESTIC ARCHITECTURE.—Instruction in this subject will be given only in connection with courses in Household Science 2 and 3. Professors RICKER and WHITE.

28. MURAL DECORATION.—Includes the study and analysis of some of the best examples of modern decorated interiors; the appropriate use of various materials; the rendering of scale drawings in color, with especial reference to the esthetic effect produced by various harmonies of color. *I.; M., W., F.; 2, 3; II.; M., W., F., I, 2; (2).* Professor WELLS.

Required: Arch. 20, 7, 9 (1 year), G. E. D. 1.

29. SHORT HISTORY OF ARCHITECTURE.—(Elective for students in the College of Science or Literature and Arts.) A careful study of the important historical styles of architecture, their origin, systems of construction, elementary forms, decoration by sculpture and painting, chief kinds of buildings, and a series of selected examples, illustrated by lantern slides. Offered to not less than four students. *Two weekly lectures with reading of Hamlin's History of Architecture. I.; arrange time; (2).* Professor RICKER.

30. THESIS.—The preliminary work on the thesis is begun during the first semester, but no special time is set apart on the program nor any credit granted for it during this semester.

In the second semester credit may be given to the amount of six hours in architecture and four hours in architectural engineering, and a regular time shall be assigned on the program for this part of the work, but the amount of time so prescribed shall in no case be considered to be the total thesis requirement. Professors RICKER, WHITE, and WELLS, and Mr. DAVISON.

31. ARCHITECTURAL READINGS.—Students being allowed a choice of French, German or English for the required year of Freshman language, a similar choice is necessary in this study. The object of the course is to obtain a knowledge of architectural terms in French or German, or of the allied arts of painting and sculpture by students who select English.

French: Reading of Palustre's *Architecture Renaissance*. *German:* Reading of Jancke's *Der Architekt*. *English:* Van Dyke's *History of Painting*, and Marquand's *History of Sculpture*.

Weekly readings or recitations. *I.*; 4; *II.*; 3; *arrange days*; (1).
Professor RICKER.

Required: French, German, or English for at least one year.

32. WATER COLOR RENDERING.—Exercises in the practice of the different technical methods of rendering architectural drawings and designs. *I.*; *M.*; 6, 7, 8; (1). Professor WELLS.

Required: G. E. D. 1, Arch. 29, 8, 35, 9 (1 year).

33. RENDERING OF ORNAMENT.—Exercises in rendering full sized details of relief ornament and of sculpture for architectural decoration. *I.*; *W.*, *F.*; 6, 7, 8; (2). Professor WELLS.

Required: G. E. D. 1, Arch. 20, 35, 9 (1 year).

34. ARCHITECTURAL ENGINEERING SEMINARY.—Reports on and discussions of current literature germane to architectural construction. *II.*; *F.*; 3; (2). Professor WHITE.

Required: Arch 2, 3, 4, 19 (1 semester), T. & A. M.

35. PERSPECTIVE SKETCHES.—Rendering of scenic effects and views in water colors, comprising skies, distance, trees, foliage, shrubbery, and foreground details. The class will practice out-door sketching when the weather permits. *I.*; *Tu.*; 6, 7, 8; (1). Professor WELLS.

Required: G. E. D. 1, 2; to be taken with Arch. 14.

COURSES FOR GRADUATES

Primary

- 101. Construction of Extensive Wooden Buildings.
- 102. Recent Uses of Stone, Brick, and Terra Cotta in Architecture.
- 103. Metallic Skeleton Buildings.
- 104. Fire-resisting and Fire-proof Buildings.
- 105. Sanitation of Public and Semi-public Buildings.
- 106. Researches on the Evolution of Architectural Styles.
- 107. Higher Applications of Graphic Statics.
- 108. Heating and Ventilation of Large Buildings.
- 109. Higher Studies in Architectural Design.
- 110. Researches and Experiments in Applied Esthetics.
- 111. Translation of an approved Technical Architectural Work from the French or German.
- 112. Indexing and Classification of Periodicals, Books, Data, and Technical Information for Architects and Engineers.

Secondary

- 113. Stereotomy Applied to American Problems.
- 114. Examinations of Heating and Ventilation of Buildings.
- 115. Photography for Architects.
- 116. Methods of Reproducing Drawings, Specifications, etc., for Architects.
- 117. Higher Problems and Methods in Perspective.
- 118. Practice in Estimates, Specifications, etc., for Large Buildings.
- 119. Higher Industrial Design.
- 120. Advanced Water-color Painting.
- 121. Study of Office Methods and Arrangements.
- 122. Any *primary* offered in the College of Engineering.
- 123. Electric Lighting and Wiring for Buildings.

ART AND DESIGN

Professor FREDERICK, Assistant Professor LAKE, Miss JONES

1. FREE-HAND DRAWING.—An elementary course offering, first, lectures on the principles of perspective followed by drawing practice, and, second, work arranged to be of direct assistance to the students in their several courses in the University. All students entering the department are required to enter this class or pass an examination in the subject. *I.*; *section A*, daily; 1, 2; (3); *section B*, M., W., F.; 3, 4; *section C*, Tu., Th., Sat.; 3, 4; *section D*, M., W., F.; 6, 7; (2). *II.*; daily; 1, 2; (3). Assistant Professor LAKE and Miss JONES.

2. LIGHT AND SHADE.—Study of values in charcoal, pencil, or monochrome wash as a preparation for advanced work, especially courses 4 and 5. *II.*; *section A*, M., W., F.; 3, 4; *section B*, Tu., Th., Sat.; 3, 4; *section C*, M., W., F.; 6, 7; (2). Assistant Professor LAKE.

Required: Art and Design 1.

3. ANTIQUE CLASS.—Study of casts from the antique, including details of the face, masks, busts, and the figure. This course aims to give students a sound knowledge of the principles of the construction of the figure and prepare them for intelligent work from life. *I.*, *II.*; daily; 3, 4; (3). Professor FREDERICK.

Required: Art and Design 1.

4. PAINTING.—Still-life and flowers in oil and water-color; *I.*; *M., W., F.*; 6, 7; (2). *II.*; section *A, M., W., F.*; 3, 4; section *B, M., W., F.*; 6, 7; (2). Miss JONES.

Required: Art and Design 1, 2.

8. MODELING.—A course in clay modeling comprising work from the antique and from life in relief and the round. Instruction is given in casting. *Frederick's Plaster Casts and How They Are Made.* *I., II.*; *Tu., Th.*; 6, 7, 8; (2). Professor FREDERICK.

Required: Art and Design 1 or 3.

8a. Special section of course 8 for the study of ornament for architectural students. *I., II.*; *Tu. or Th.*; (1). Professor FREDERICK.

Required: Art and Design 1 or 3.

10. PEN RENDERING AND ETCHING.—In this course drawings are made with special reference to the requirements of the reproductive processes. Instruction is given in copper plate etching and chalk plate engraving. Lectures on the graphic arts and process engraving. *I.*; *S.*; 2, 3, 4; (1). Professor FREDERICK and Assistant Professor LAKE.

Required: Art and Design 1.

12. APPLIED DESIGN.—This course offers a review of the principles of design, followed by practical problems worked out in pyrography, mosaic, embroidery, etc. *II.*; *daily*, 1, 2; (3). Miss JONES.

Required: Art and Design 1.

14. PERSPECTIVE.—Lectures upon the principles of mechanical perspective. The problems given are arranged to have a direct bearing upon the work of other courses in the department. *I., II.*; *arrange time*; (1). Professor FREDERICK.

16. COLOR.—The use of color in design and in interior decoration. The aim of this course is to develop color appreciation. *I., II.*; *Tu.*; 4; (1). Professor FREDERICK.

19. HISTORY OF ART.—The history of architecture and sculpture is studied the first semester, and the history of painting the second. *I., II.*; *M.*; 8; (1). Professor FREDERICK.

Required: One year of University work.

20. TEACHERS' CLASS.—In this class an application of the work offered by the department is made to the public school problems. Published courses of art study for the public schools are compared, and the class plans and arranges a course of art study for

the eight grades of the public schools. *I., II.; arrange time; (1).*
Professor FREDERICK.

Required: Art and Design 1, 2 4.

ASTRONOMY

Assistant Professor STEBBINS

1. ELEMENTARY ASTRONOMY.—This is a course for beginners and does not require mathematics. From lectures and the text, the student will be given a general view of the subject, and this class room work will be supplemented by direct observation of the sky. Besides identifying the principal constellations, each student will follow such changes as the motions of the moon and planets, and the fluctuations of variable stars. Some simple work will be done with the instruments of the observatory, but emphasis will be laid on those observations which can be made without apparatus, and which the student can do in after life. *I.; M., W., F.; 4; (3).* Assistant Professor STEBBINS.

3. GENERAL ASTRONOMY FOR ENGINEERS.—This course is intended to be taken with course 6 by engineers. In the class room is given a general view of the subject, which will be supplemented by the observational work of the practical course. *II.; M., W., F.; 3, 4; (3).* Assistant Professor STEBBINS.

Required: Mathematics 4, 6, 7 or 8a.

4. GENERAL ASTRONOMY.—This is a beginners' course similar to astronomy 1, but more extended in its scope. *II.; daily; 2; (5).* Assistant Professor STEBBINS.

6 PRACTICAL ASTRONOMY.—This course is offered especially for engineers. Rough and accurate determinations of latitude, azimuth, and time, are the essential parts of the course; and emphasis is laid on the methods which the engineer will be able to use with the ordinary surveyor's transit. The necessary amount of spherical trigonometry is given at the beginning of the work. This course is also designed to train the student in the art of computing. *Comstock's Field Astronomy for Engineers. II.; Tu., Th.; 3, 4; (2).* Assistant Professor STEBBINS.

Required: Mathematics 4, 6, 7 or 8a.

7. THEORETICAL ASTRONOMY.—This course begins with the elementary theory of the motions of the heavenly bodies, and is intended to lead the student up to the actual computation of a come-

tary orbit. *I., II.; arrange time; (3).* Assistant Professor STEBBINS.

Required: Mathematics, 1, 3, 8a, 8b or 7, 9.

9. CELESTIAL MECHANICS.—A continuation of course 7. Introduction to the theory of disturbed planetary motion. *I., II.; arrange time.* Assistant Professor STEBBINS.

Required: Mathematics 16; Astronomy 7.

10. SEMINARY AND THESIS.—*I., II.; arrange time; (3).* Assistant Professor STEBBINS.

14. OBSERVATIONAL ASTRONOMY.—This course is intended for those who wish to become familiar with the working methods of an astronomical observatory. The problems set for solution are largely individual. *II.; arrange time; (3).* Assistant Professor STEBBINS.

Required: Astronomy 3, 6, 15.

15. GEODETIC ASTRONOMY.—A course in continuation of astronomy 3, 6, for those who wish to go into geodetic work. Advanced work with the sextant, transit, and zenith telescope. The methods taught are similar to those of the United States Coast Survey. *I.; arrange time; (3).* Assistant Professor STEBBINS.

Required: Astronomy 3, 6.

BOTANY

Professor BURRILL, Assistant Professor HOTTES, Mr. BRISCOE, Mr. BALLARD, Mr. CROSBY

1. HISTOLOGY AND PHYSIOLOGY.—General vegetable histology and vegetable physiology, or study of the cells and tissues of plants and their courses of development in structures and organs; and studies in the general activities of plants correlated with external conditions. *II.; 6, 7; (5).* Assistant Professor HOTTES, Mr. BALLARD and Mr. CROSBY.

Required: Entrance credit in Botany, or Botany II; Chemistry I, or Physics 2a; Art and Design I.

2. MORPHOLOGY.—The general morphology and taxonomy of plants, including a study of selected types. Occasional field excursions. *I.; 6, 7; (5).* Professor BURRILL and Mr. BRISCOE.

Required: Entrance credit in Botany, or Botany II; Art and Design I.

In courses 1 and 2 taken together, either in the order of the numbers or the reverse, there is offered a comprehensive treatment

of the subject, to serve the double purpose of an introduction to the science for those who desire to continue the study, and as a complete course for general students. Each semester's work is, however, independent, and may be separately credited.

3. CYTOLOGY AND PHYSIOLOGY.—Lectures, laboratory work and assigned reading. The course extends through the year, but the work of each semester is credited separately under the designations of 3a and 3b. The first semester is devoted mainly to cytology and histology, with special attention to technique; during the second semester experimental physiology receives chief attention. *I., II.; 3, 4; (5).* Assistant Professor HOTTES. (See Course 14.)

Required: Botany 1.

4. TAXONOMY OF SPECIAL GROUPS.—Mostly laboratory and herbarium work, and assigned reading. Field excursions are required. The course extends through the year, but the work of each semester is credited separately under the designations of 4a and 4b. The first semester is devoted mainly to spermaphytes, the second to sporophytes. *I., II.; 1, 2; (5).* Professor BURRILL.

Required: Botany 2.

5. BACTERIOLOGY.—An introduction to the knowledge of the subject and instruction in methods. *II.; 6, 7; (5).* Professor BURRILL, and Mr. BRISCOE.

Required: Chemistry 1, and at least one semester's work in botany or zoölogy, in the University.

6. BACTERIOLOGY FOR SANITARY ENGINEERS.—Bacteriological methods and their application in water analysis and sewerage. *I. (last seven weeks); daily; 3, 4; (2).* Professor BURRILL and Mr. BRISCOE.

7. PLANT PATHOLOGY.—Diseases and injuries of plants. Mostly laboratory, herbarium, and field work, and assigned reading. *I.; M., W., F.; 1, 2; (3).* Professor BURRILL.

Required: Botany 1, 2.

8. ECONOMIC BOTANY.—Useful plants and plant products. Lectures and assigned reading. *I.; Tu., Th.; 1, 2; (2).* Professor BURRILL.

9. INVESTIGATIONS AND THESIS.—Research work upon selected subjects. Special arrangements for this work should be made during the preceding year. *I., II.; arrange time; (5).* Professor BURRILL and Assistant Professor HOTTES.

Required: Botany 1, 2 and at least one year from 3, 4, 5, 7.

10. SEMINARY.—Reports and discussions upon assigned topics and results of research work. For advanced and graduate students. *I., II.; F.; arrange time; (1).* Professor BURRILL.

11. INTRODUCTORY COURSE.—Elementary work chiefly upon flowering plants, including their general structure, activities, life-relations, and classification. The laboratory work is supplemented by field observations and by the study of text. The course is planned to offer general students an opportunity of gaining elementary knowledge of the vegetable kingdom. *I.; 6, 7; (2½, or 5).* Assistant Professor HOTTES, Mr. BALLARD and Mr. CROSBY.

12. LECTURES AND DEMONSTRATIONS UPON BACTERIA.—An elementary course in which is presented the facts concerning the existence, size, form, life processes, and effects of bacteria and allied organisms, with special attention to those of economic importance, or of most common utility or detriment to man. *I., second half; 8; (1).* Professor BURRILL.

13. GERMAN READINGS.—A study of botanical literature in German, intended to give technical information and practice of accurate and rapid reading. This course, together with zoölogy 14, will be accepted instead of German 6 of the prescribed list of all except students in chemistry and chemical engineering. *II.; arrange time; (4).* Assistant Professor HOTTES.

Required: German 4.

14. LECTURES OF COURSE 3.—First semester on the plant cell: the physiology of its different constituents and the parts these play in the process of fertilization; various theories of heredity and species formation. Credited as 14a. Second semester on growth and respiration: the phenomena of growth and respiration discussed with reference to the influence external agents exert upon them through irritability. Credited as 14b. *I.; II.; Tu., Th.; 3; (2).* Assistant Professor HOTTES.

COURSES FOR GRADUATES

After at least one year of biological work graduates may elect any of the Courses 1 to 10 inclusive for minor credit, and of Courses 3 to 10 with assigned additions for major credit towards an advanced degree. The following are open only to graduates of liberal botanical training.

101. BIOLOGICAL BOTANY.—The preparation and study of material by histological and embryological methods, and experiment

work with living vegetation in the laboratory and field in working out special problems in the development, physiology, and pathology of plants.

102. SYSTEMATIC BOTANY.—Critical and comparative studies of species included in chosen groups of spermaphytes or sporophytes, or from selected geographic areas, in connection with considerations of genealogic development, geographic distribution, and inter-related association.

103. BACTERIOLOGY.—Investigations upon morphologic and physiologic variation due to treatment; systematic studies upon the number, validity, and relationship of species, researches upon special saprophytic or parasitic kinds of bacteria and upon methods of favoring or combating their activities.

104. EVOLUTION OF PLANTS.—Observations and experiments upon plants and studies in related literature, in gaining information upon such topics as the following: The influence of invironment, effects of self and cross fertilization, tendencies of variation, philosophy of selection, nature and laws of heredity.

CHEMISTRY.

Professors PARR, GRINDLEY; Assistant Professors LINCOLN, CURTISS; Mr. SAMMIS, Dr. DEHN, Dr. WALTON, Dr. BRYAN, Mr. WILLIAMS, Mr. CLARK, Mr. EMMETT, Mr. HEUSE, Mr. INGELS, Miss FLATHER, Mr. ZIMMERSCHIED, Mr. WILCOX

1. ELEMENTARY INORGANIC CHEMISTRY.—This course deals with the general principles of the science.

Remsen's College Chemistry I.; Lecture Tu., Th., 4.

Section A (Science and Agriculture), Lab., Tu., Th., Sat., 1, 2; Quiz, W., F., 1.

Section B (Agriculture), Lab., M., W., F., 3, 4; Quiz, Tu., Th., 3.

Section C (Agriculture, Science, and Literature and Arts), Lab., M., W., F., 6, 7; Quiz, Tu., Th., 7.

Section D (Engineers), Lab., Sat., 2, 3, 4; Quiz, W., F., 4.

Section E (Engineers), Lab., Th., 6, 7, 8; Quiz, W., F., 1.

Section F (Engineers), Lab., Sat., 2, 3, 4; Quiz, W., F., 7.

Section G (Engineers), Lab., Th., 1, 2, 3; Quiz, W., F., 7.

Section H (Engineers), Lab., Th., 6, 7, 8, or Sat., 2, 3, 4; Quiz, Tu., Th., 3.

Section I (Engineers) Lab., Th., 6, 7, 8; Quiz, W., F., 4.

Section J (Engineers), Lab., Th., 6, 7, 8, or Sat., 2, 3, 4; Quiz, W., F., 4.

II.; Lecture and Quiz, M., W., F., 2; Laboratory Tu., Th., Sat., 1, 2. For engineers (4); for all others (5). Professor GRINDLEY, Mr. SAMMIS, Dr. DEHN, Dr. BRYAN, Mr. WILLIAMS, Mr. CLARK, Mr. HEUSE, Mr. INGELS, Miss FLATHER.

2. DESCRIPTIVE INORGANIC CHEMISTRY.—This course is required of all chemical students. It is mainly devoted to a study of the metallic elements, their classification, compounds, and chemical properties. The work is from lectures and assigned text, without laboratory work.

Newth's Inorganic Chemistry. II.; Section A., M., W., F., 2; Section B., M., W., F., 3; (3). Dr. BRYAN.

Required: Chemistry 1.

3a. QUALITATIVE ANALYSIS.—This course consists of lectures, recitations, and laboratory practice in the ordinary processes of qualitative analysis. *I.; daily; 1, 2; (5). II.; Lecture Tu., Th., 2; Laboratory, Section A, daily, 3, 4; Section B, daily, 6, 7; (5). Professor GRINDLEY, Mr. SAMMIS, Dr. BRYAN, Mr. WILLIAMS and Mr. CLARK.*

Required: Chemistry 1.

3b. QUALITATIVE ANALYSIS, Minor.—This course is arranged to meet the wants of Agricultural and Science students. *II. (first half); Section A, daily, including Sat., 1, 2; Section B, daily, including Sat., 3, 4; Section C, daily, 6, 7, and Sat., 3, 4; (2½). Professor GRINDLEY, Mr. SAMMIS, Dr. DEHN, Dr. BRYAN, Mr. WILLIAMS, Mr. CLARK, Mr. HEUSE, Mr. INGELS, Miss FLATHER.*

Required: Chemistry 1.

4. ELEMENTS OF ORGANIC CHEMISTRY, Minor.—A brief course in organic chemistry provided especially for students of agriculture and general science. *II. (last half); Section A, daily, including Sat., 1, 2; Section B, daily, including Sat., 3, 4; Section C, daily, 6, 7, and Sat., 3, 4; (2½). Professor GRINDLEY, Mr. SAMMIS, Dr. DEHN, Dr. BRYAN, Mr. WILLIAMS, Mr. CLARK, Mr. HEUSE, Mr. INGELS, Miss FLATHER.*

Required: Chemistry 1, 3b.

5a. ELEMENTARY QUANTITATIVE ANALYSIS.—The laboratory work comprises a series of experiments which illustrate the fundamental principles of gravimetric and volumetric methods. The lectures and recitations consist of a consideration of stoichiometrical

relations, the fundamental laws of chemistry and their application to the study of solutions. Medical preparatory students are given special problems in the latter part of the course.

I., II., Lectures Tu., Th.; 3; Laboratory 10 periods per week in two sections. Section A (medical), M., W.; 6, 7, 8; F.; 5, 6, 7, 8; Section B (chemical), Tu., Th.; 6, 7, 8; Sat., 1, 2, 3, 4; (5). Assistant Professor LINCOLN and Dr. WALTON.

Required: Chemistry 3a or 3b and 4.

5b. QUANTITATIVE ANALYSIS.—Continuation of 5a. A comparative study of methods with practice in the analysis of silicates, metallic compounds and alloys. *I., II.; Lectures, Tu., Th., 3; Laboratory, Tu., Th., 6, 7, 8 and Sat., 1, 2, 3, 4; (5). Professor PARR and Dr. WALTON.*

Required: Chemistry 5a.

5c. FOOD ANALYSIS.—This course includes the analysis of food stuffs, grains, milled products, alcoholic beverages, baking powders, vinegars, syrups, sugars, etc. Students who have taken work amounting to five hours' credit in this course may arrange to do more advanced work along the following lines: (a) the study of methods for detecting food adulterations; (b) the separation and determination of the nitrogenous constituents of animal and vegetable foods; (c) the identification and estimation of the carbohydrate constituents of food products. *II.; Lecture, Tu.; 6; Laboratory, daily 1, 2, or 3, 4; (3, 5). Dr. WALTON.*

Required: Chemistry 5a or 13a, 4 or 9.

6a. METALLURGY.—A general course in metallurgical processes. Lectures and assigned reading. *I.; Tu., Th., 4; (2). Professor PARR.*

Required: Chemistry 5a.

6b. CHEMICAL TECHNOLOGY.—This is a course of lectures comprising a study of technological chemistry as illustrated in those industries having a chemical basis for their principal operations and processes. Much use is made of the journals. *Thorp's Industrial Chemistry* is used as a guide. No laboratory work. *II.; Tu., Th.; 4; (2). Professor PARR.*

Required: Chemistry 5a.

8. IRON AND STEEL ANALYSIS.—Analyses are made of all the constituents by both rapid, or technical, and standard methods. The course also includes the analysis of furnace slags and a study of the

methods for decomposing ores and refractory products. *II.*; *Lecture, Th., 6; Laboratory, Tu., Th., 2, 3, 4; (2).* Dr. WALTON.

Required: Chemistry 5b.

9. ORGANIC CHEMISTRY.—The work of this course consists in the discussion of the characteristics of the more typical and simple organic compounds, followed by a brief consideration of most of the important classes of derivatives of carbon. Remsen's Organic Chemistry. Must be accompanied by either 9a or 9c. *II.*; *M., W., F.; 2; (3).* Assistant Professor CURTISS.

Required: Chemistry 2, 5a.

9a. ORGANIC SYNTHESIS AND ANALYSIS.—Laboratory work for students of the chemical course, consisting of the preparation of typical organic compounds, and ultimate organic analysis. *II.*; *Laboratory, 6 periods per week; arrange time; (2).* Assistant Professor CURTISS and Mr. WILCOX.

9b. ORGANIC SYNTHESIS AND ANALYSIS.—Continuation of 9a, to accompany Chemistry 14. *I.*; *Laboratory, 6 periods per week; arrange time.* Assistant Professor CURTISS and Dr. DEHN.

9c. ORGANIC SYNTHESIS AND ANALYSIS.—Laboratory work in organic chemistry for students of the medical preparatory course. A few typical organic compounds are prepared, but the work consists mainly in a study of the chemical reactions and transformations of such organic substances as are especially involved in processes of nutrition or are used in medical practice. *II.*; *Laboratory, 6 periods per week; arrange time; (2).* Assistant Professor CURTISS and Mr. WILCOX.

10. SANITARY ANALYSIS.—The work consists in the examination and analysis of potable and mineral waters, air, etc. *II.*; *M., 6, 7, 8, or Sat., 2, 3, 4; (1).* Professor PARR and Dr. WALTON.

Required: Chemistry 5a.

11. RESEARCH.—In the senior year a special line of work is arranged for each individual, designed particularly to develop self-reliance and initiative in dealing with new problems or topics needing comparative study or review. A thesis must be prepared embodying a thorough review of the literature of the subject, together with the work done in the laboratory. As far as possible the subject must be determined upon and reading begun in the junior year. A seminary is arranged for reports and discussion. A minimum of five semester hours is required. *I., II.; arrange time; (5).* Professors PARR and GRINDLEY, Assistant Professors LINCOLN and CURTISS and Dr. DEHN.

12. HISTORICAL CHEMISTRY.—A brief historical survey of the development of the science, from the earliest times to the present. The course includes the discussion of the evolution of ideas concerning fundamental principles, laws, and theories of chemistry, description of the applications of chemistry in related sciences, and the growth of important chemical industries. Lectures and assigned reading. *II.*; *M.*, 8; (*I*). Professor PARR. Open to Juniors and Seniors. [Not given in 1905-6.]

13a. AGRICULTURAL ANALYSIS.—This course is arranged to meet the special wants of agricultural students. The work begins with the quantitative determination and separation of the more important constituents of soils, fertilizers, and agricultural products; it includes the chemical analysis of foodstuffs, such as grains, fodders, dairy products and meats. *I.*; *section A, Lecture, M.*, 3. *Laboratory, daily 1, 2. Section B, Lecture, W.*, 2. *Laboratory, daily 3, 4; (5).* Assistant Professor LINCOLN and Dr. WALTON.

Required: Chemistry 3a or 3b and 4.

13b. ADVANCED AGRICULTURAL ANALYSIS.—This course is offered to students who wish to specialize in agricultural chemistry or agricultural experimentation. The work includes the analysis of butter and cheese, the complete analysis of foods, soils, plants, plant ash, rain and drain waters, and the determination of the fuel value of foods. If desirable, the work may be varied to meet the special needs of the individual student. *II.*; *daily; 1, 2 or 3, 4; (3, 5)* Assistant Professor LINCOLN and Dr. WALTON.

Required: 5a or 13a.

14. ORGANIC CHEMISTRY.—Special chapters of organic chemistry. Richter's Organic Chemistry. Must be accompanied by 9b. *I.*; *M., W., F.*; 3; (*3*). Assistant Professor CURTISS.

Required: Chemistry 9.

16. CHEMISTRY FOR ENGINEERS.—This course is arranged particularly for mechanical engineers. It involves the proximate analysis of coals, determination of calorific power, technical analysis of furnace gases, examination of boiler waters, lubricating oils, etc. *II.*; *Lecture, Tu.*, 2. *Laboratory, W., F.*, 6, 7, 8; (*3*). Professor PARR, Mr. ZIMMERSCHIED and Mr. INGELS.

Required: Chemistry 1.

18. SPECIAL COURSES.—Special courses as indicated below, consisting mainly of laboratory work, may be arranged for those com-

petent to pursue them. From 1 to 10 hours' credit will be allowed in the undergraduate courses for such work.

(a). Special problems in assaying and ore treatment. Free-milling chlorination and cyanide tests. Professor PARR and Dr. WALTON.

(b). Advanced Metallurgical Chemistry. Professor PARR.

(c). Analysis and Calorimetry of Fuels. Professor PARR.

(d). Paints, oils, etc. Protective coverings for wood and iron. Professor PARR.

(e). Analysis of Commercial Fertilizers. Dr. WALTON.

21. PROXIMATE ORGANIC ANALYSIS.—Analysis and valuation of various commercial organic materials and products: (a) Pharmaceutical assaying, including the valuation of drugs and various pharmaceutical preparations, tinctures, extracts, etc., etc.; (b) analysis of proprietary articles, medicines, pills, ointments, salves, etc.; (c) fats, waxes, oils, perfumes, flavoring extracts; (d) dye stuffs. Analysis, tests and identification of raw materials, coloring matters and dyes upon the fiber; (e) rubber, paper, fibers, inks, glue, etc. *Allen's Commercial Organic Analysis, Sadtler and Trimble's Pharmaceutical Chemistry. I.; arrange time; (5 or 10).* Dr. DEHN.

24. TOXICOLOGY.—Mainly laboratory work upon the detection and estimation of the more common poisons, organic and inorganic, wall papers, etc. *II.; arrange time; (5).* Dr. DEHN.

Required: Chemistry 2, 3b, 5a, and either 4 or 9.

25. URINALYSIS.—Chemical and microscopical examination of urine. *II.; Laboratory, 6 periods; arrange time; (2).* Dr. DEHN.

Required: Chemistry 2, 3b, 5a.

27. QUALITATIVE ANALYSIS OF THE RARE ELEMENTS.—A detailed study of the rare elements and their compounds. The work consists mainly in the identification and separation of the elements and the study of the formation, solubilities and chemical reactions of their salts. Reading is assigned in connection with laboratory work. *II.; daily; 6, 7; (3).* Professor GRINDLEY and Dr. BRYAN.

Required: Two years' work in Chemistry.

28. METHODS OF QUALITATIVE ANALYSIS.—This course consists in the study and investigation of new and special methods of qualitative analysis. *I.; arrange time; (3, 5).* Professor GRINDLEY and Dr. BRYAN.

Required: Two years' work in Chemistry.

30. EXACT GAS ANALYSIS.—A more extensive course than is

required for the ordinary technical methods. *Hempel's Gas Analysis and Assigned Readings. I.; arrange time; (3).* Assistant Professor LINCOLN.

Required: Two years of work in Chemistry.

31. ELEMENTARY PHYSICAL CHEMISTRY.—This course, extending through one semester, is designed to give an elementary knowledge of the paramount facts of physical chemistry, and their relation to common and practical chemical problems. The instruction is by lectures and recitations, supplemented by work in the laboratory. *Walker's Introduction to Physical Chemistry. II.; Lectures, M., W., F.; 4; Laboratory, 6 periods per week, W., F.; 6, 7, 8; (5).* Assistant Professor LINCOLN.

Required: Chemistry 5a, 9; Physics 1, 3.

32. PHYSICAL CHEMISTRY.—This is a general course of lectures and recitations extending throughout the year, and is designed for those students of chemistry and physics who desire more extensive work than course 31 affords. A knowledge of differential calculus is desirable. It is recommended that this course be supplemented by laboratory work (Course 33) at least three hours a week. *Walker's Introduction to Physical Chemistry*, supplemented by assigned readings. *I. and II.; Lectures, Tu., Th.; 1; (4).* Assistant Professor LINCOLN.

Required: Chemistry 5a, 9; Physics 1, 3.

33. PHYSICAL CHEMISTRY.—A laboratory course supplementary to course 32. The work consists of a series of experiments, chosen to familiarize the student with the general methods used in technical and theoretical work, the sources of error and the methods of eliminating the same. It comprises a study of the balance, physical properties—density, rotation of the plane of polarized light, refraction, etc.—thermometry, distillation and crystallization, molecular weight determinations, thermo-chemical and electro-chemical measurements, reaction, velocities, etc. *I. and II.; Laboratory, 9 to 15 periods; arrange time; (2, 5).* Assistant Professor LINCOLN.

Required: Chemistry 5a, 9.

34. ELECTROCHEMISTRY.—Lectures and Recitations. This course, which includes the modern theories of solutions, comprises a detailed study of the practical applications of electricity to chemical industrial processes, the refining of metals and their electrodeposition. Intended for students going into technical work. It is recommended that this course be supplemented with laboratory work

(Course 35). *Leblanc's Electrochemistry and Blount's Practical Electrochemistry*. I.; Lectures, M., W., F.; 1; (3); II.; Lectures, M., W., F.; 4; (3). Assistant Professor LINCOLN.

Required: Chemistry 1, 3a or 3b; Physics 1, 3.

35. ELECTROCHEMISTRY.—Laboratory work to accompany lecture course 34. This course is intended for students going into technical work and for engineers. Special emphasis is placed upon a study of the electrochemical products and the percentage yield as influenced by the current density, the kind of electrodes employed, as well as by changes in the temperature and in the concentration. I. or II.; *arrange time*; (2, 5). Assistant Professor LINCOLN.

Required: Chemistry 5a or 20; Physics 1, 3.

36. SPECTROSCOPIC ANALYSIS.—This course comprises lecture work with laboratory practice. The student will do practical work with the spectroscope in determining qualitatively the constituents of various mixtures, minerals, and solutions by means of the spark, oxyhydrogen flame, and absorption spectra. I., II.; *by appointment*; (2, 4). Assistant Professor LINCOLN.

Required: Chemistry 4 or 9, 5a, 7a; Physics 1, 3.

41. CHEMISTRY OF MEATS.—A course consisting mainly of laboratory work, in which students may specialize upon any of the following subjects: Chemistry of the cooking of meats; losses involved in the cooking of meats; digestibility of meats; comparative study of the methods for determining the nitrogenous constituents of meats; separation, purification and estimation of the nitrogenous constituents of meats. I. or II.; *arrange time*; (5, 15). Professor GRINDLEY.

Required: Two years' work in Chemistry.

61. INDUSTRIAL CHEMISTRY.—A laboratory course in the preparation of chemical products from raw materials. The manufacture and proving of pure chemicals, fractionation, and other processes of the manufacturing chemist. II.; Tu., Th., 6, 7, 8; (2). Professor PARR.

Required: Chemistry 5a.

65. TECHNICAL GAS AND FUEL ANALYSIS.—Examination of gases, gas mixtures, flue gases and fuels. Determination of calorific values and calculation of efficiencies. I.; *Last 7 weeks, daily* 1, 2; (2). Assistant Professor LINCOLN.

69. ASSAYING.—The fire assay of lead, gold and silver ores. Fluxes, re-agents, and charges are studied in connection with vari-

ous typical ores, and practice given in use of the crucible and muffle furnaces and in the manipulations connected with fire assaying. *I.*; *Last 7 weeks, daily; 1, 2; (2).* Professor PARR and Dr. WALTON.

Required: Chemistry 5a.

90. SEMINARY.—For juniors. *I., II.; M., 6; (1).* Professor PARR.

91. SEMINARY.—For seniors. *I., II.; M., 4; (1).* Professor PARR.

COURSES FOR GRADUATES

Courses 5a to 51, with the exception of 9, 9a, 13a, 16, 20 and 43, may be taken for graduate credit by students not specializing in chemistry. The following courses are for graduates only:

101. ORGANIC CHEMISTRY.—Special investigations in the aliphatic or in the aromatic series.

102. INORGANIC CHEMISTRY.—Research work in general inorganic chemistry, including the critical and constructive study of methods of analysis, both quantitative and qualitative.

103. PHYSICAL CHEMISTRY.—Investigation of special problems, including thermo-chemical research.

104. CHEMISTRY OF FOODS.—Investigations of the composition, fuel value, digestibility, and dietary value of foods, and the chemical changes involved in cooking.

105. AGRICULTURAL CHEMISTRY.—Special investigations in the field of agricultural chemistry, including the chemistry of plants, foods, soils, and rain, drain, and ground waters.

106. RESEARCH IN METALLURGICAL CHEMISTRY.—(a) Action of solvents in extraction of gold and silver from their ores. (b) Methods of analysis of ores and products.

107. INVESTIGATION OF WATER SUPPLIES.—In connection with State Water Survey.

108. INVESTIGATION OF FUELS.—

(a) Heating power, calorimetric methods.

(b) Adaptation of bituminous coal to gas manufacture, purification of products.

(c) Coke and by-products.

109. SPECIAL PROBLEMS IN INDUSTRIAL CHEMISTRY.—

(a) Corrosion and scaling of steam boilers.

(b) Purification of feed water.

(c) Cements and mortars.

(d) Paints and pigments.

CIVIL ENGINEERING

Professor BAKER, Assistant Professor FRINK, Mr. WEBBER, Mr. MALCOLM, Mr. PARKER, Mr. WATERBURY, Mr. RUMP

I. ROADS AND PAVEMENTS.—The value and importance of road improvement in country highways and the best means of securing it are considered, together with the principles and details of construction of earth, gravel, and macadam roads. In city streets, the methods of construction, cost, durability, and desirability of the various kinds of pavement, and the questions of grades, cross-sections, methods of assessment of cost, and methods of maintenance and cleaning are treated. *Baker's Roads and Pavements. II.; section C, Tu., Th., 2; section D, W., F., 2; section E, Tu., Th., 1; section F, M., W., 6; (2).* Assistant Professor FRINK and Mr. WEBBER.

Required: Mathematics 4; General Engineering Drawing 1, 2; Civil Engineering 21, 22, 23.

4. RAILROAD ENGINEERING.—In the field practice the class makes preliminary and location surveys of a line of railroad of sufficient length to secure familiarity with the methods of actual practice. Each student makes a complete set of notes, maps, profiles, calculations, and estimates. The principles of economic location and the construction of railways are considered. A study is made of railway appliances and of maintenance-of-way practice. *Allen's Railway Curves and Earthwork, Talbot's Transition Spiral, and Tratman's Track. I.; sections C and D, M. 2-9, Tu. 7, W. 2-4, Th. 7; sections E and F, Tu. and Th. 2, W. 6-8; F. 2-9, (5).* Assistant Professor FRINK and Mr. WEBBER.

Required: Civil Engineering 21, 22, 23.

4a. RAILROAD ENGINEERING.—The first eleven weeks of course 4 are for students in municipal and sanitary engineering. (3).

5. MASONRY CONSTRUCTION.—The students have experiments in the cement laboratory, in testing cement, mortar, stone, and brick. *Baker's Masonry Construction. I.; section A, Tu., W., Th., F., 1, and S. 3-4; section B, Tu., W., Th., F., 6, and Th. 3-4; section C, Tu., W., Th., F., 4, and M., 3-4; (5).* Professor BAKER and Mr. WATERBURY.

Required: Theoretical and Applied Mechanics 7, 8, 9, 10.

10. SURVEYING.—For students in the courses of architecture, architectural engineering, electrical engineering, and mechanical

engineering. Areas with chain and compass, U. S. public land surveys, and principles of re-establishing corners; use of transit in finding distances, areas, and in laying out buildings; use of the level in finding profiles and contours. *Pence and Ketchum's Surveying Manual. II.*; section A, M., Th., 3, 4; section B, Tu., S., 3, 4; section C, Tu., W., 1, 2; section H., Th., S., 1, 2; (2). Mr. WEBBER and Mr. RUMP.

Required: Math. 4; General Engineering Drawing 1, 2; Physics 1, 3.

12. BRIDGE ANALYSIS.—Instruction and practice are given in the computation of the stresses in the various forms of bridge trusses, by algebraic and graphical methods, under different conditions of loading. *Johnson's Modern Framed Structures. I.*; section A, Tu., Th., 3; section B, Tu., Th., 1; section C, Tu., Th., 6; (2). Mr. MALCOLM.

Required: Theoretical and Applied Mechanics 7, 8, 9, 10; for civil engineering students, Civil Eng'g. 19 and 20, and for architectural engineers, Arch. 5.

13. BRIDGE DETAILS.—The student makes a tracing of a shop drawing of a bridge, then makes a critical report upon each element of the design, and computes the cost of the bridge. Afterward a comparative study is made of the several forms of details employed by leading designers. *I.*; section A, M., W., F., 3, 4; section B, M., W., F., 1, 2; section C, M., W., F., 6, 7; (3). Mr. MALCOLM.

Required: Civil Eng'g 12 and free hand sketches, with dimensions, showing full details of a bridge measured by the student.

14. BRIDGE DESIGN.—Each student designs a bridge, proportioning the sections and working out the details, and afterward makes a complete set of drawings. *II.*; section A, M., Tu., W., Th., F., 3, 4; section B, M., Tu., W., Th., F., 1, 2; section C, M., Tu., W., Th., F., 6, 7; (5). Mr. MALCOLM.

Required: Civil Engineering 12, 13.

14a. BRIDGE DESIGN.—Part of course 14 above for Municipal and Sanitary Engineering students. *II.*; section B, M., W., 1, and Tu., Th., F., 1, 2; (3).

16. ENGINEERING CONTRACTS AND SPECIFICATIONS.—A study is made of the fundamental principles of the law of contract, and of examples of the general and technical clauses of various kinds used in engineering specifications. *Johnson's Engineering Contracts and*

Specifications. II.; section A, M., F., 1; section B, Tu., Th., 4; section C, Tu., Th., 1; (2). Professor BAKER.

Required: Civil Engineering 5, 12, 13; Municipal and Sanitary Engineering 2, 3.

18. TUNNELING.—A study is made of the principles of tunneling, and of the practice of the more noted tunnels. *Prelini's Tunneling.* II.; section A, M., 2; section B, M., 3; section C, M., 4; (1). Professor FRINK.

Required: Mechanical Engineering 1, 11; Chemistry 1; Physics 1, 3; Theoretical and Applied Mechanics 7, 8, 9, 10; Civil Eng'g 5, 12, 13, 14.

19. RAILROAD STRUCTURES.—Instruction is given by lectures and references to standard authorities. Current practice is studied by the examination of existing structures and by means of a collection of the standard drawings of leading railroads. II.; section C, F., 6, 8; section D, W., 6, 8; section E, Tu., 6, 8; section F, Sat., 1, 3; (1). Mr. WEBBER.

Required: Civil Eng'g 4; Theoretical and Applied Mechanics 7, 8, 9, 10.

20. GRAPHIC STATICS.—Elements of graphic statics and applications in designing structures. II.; section C, M., Th., 6; section D, Tu., 6, Th. 7; section E, W., F., 6; section F, Tu., F., 7; (2). Professor FRINK.

Required: Math. 2, 4, 6; Theoretical and Applied Mechanics 7, 8, 9, 10.

21. SURVEYING.—Instruction is given by means of recitations, lectures, field and office work in the theory, use and adjustment of the compass, level transit, plane table, and sextant. The field work includes the determination of distances by pacing and with the chain and tape; the determination of areas with the compass, transit, and plane table; profile leveling. A careful study is made of the U. S. land survey methods, and court decisions relating to the re-establishment of corners, boundaries, etc. Problems are assigned in the re-location of boundaries, partition of land, interpretation of deeds and in city and farm surveying. *Baker's Engineers' Surveying Instruments and Pence and Ketchum's Surveying Manual.* I.; daily; sections G, H, and GH, 1, 2; sections I, J, and II, 6, 7; (5). Mr. PARKER, G and I; Mr. WATERBURY, H and J; Mr. RUMP, GH and II.

Required: General Eng'g Drawing 1, 2; Math. 4.

22. TOPOGRAPHIC SURVEYING.—The theory and use of the stadia and other instruments used in making a topographic survey are considered, as are also the methods of topographic surveying. Some time is given to topographic drawing. A complete topographic survey based on a system of triangulation is executed, including the calculations, and platting and completing the map. Some attention is given to the precise measurement of bases and angles. *Wilson's Topographic Surveying*, and *Pence and Ketchum's Surveying Manual*. II.; daily; sections G, H, and GH, 1, 2; sections I, J, and II, 6, 7; (4). Mr. PARKER, G and I; Mr. WATERBURY, H and J; Mr. RUMP, GH and II.

Required: Civil Eng'g 21; Gen. Eng'g Drawing 1, 2; Math. 4.

23. RAILROAD CURVES.—A study is made of the geometry of the circle as applied to railroad curves and of the methods of locating curves in the field. *Allen's Railway Curves and Earthwork*. II.; taken in connection with *Topographic Surveying* (C. E. 22); (1). Mr. PARKER, Mr. WATERBURY, and Mr. RUMP.

Required: Civil Eng'g 21, 22; Gen. Eng'g Drawing 1, 2; Math. 4.

24. METAL STRUCTURES.—A study is made of mill buildings, railroad trestles, mine structures, grain elevators, etc. I.; A, Tu., 6-8; B, M., 6-8; C, Tu., 1-3; (1). Mr. MALCOLM.

Required: Civil Eng'g 12, 13, 19, 20.

30. THESIS.—The preliminary work on the thesis is begun in the first semester, a weekly conference being required, but no specific time is set apart on the program for doing the work or for this conference. A credit of one semester hour is allowed for thesis work during the first semester. In the second semester weekly conferences are required, and a credit of two semester hours is granted. The preparation of the thesis may require more time than a three semester-hour subject. I (1), II, (2). *Time as assigned*. Professor BAKER.

COURSES FOR GRADUATES

All primary unless otherwise stated.

101. Location and Construction.
102. Railway Track and Structures, and their Maintenance.
103. Yards and Terminals.
104. Motive Power and Rolling Stock.
105. Signal Engineering.
106. Railway Operation and Management.

- 107. Bridge Designing.
- 108. Cantilever and Swing Bridges.
- 109. Metallic Arches.
- 110. Metallic Building Construction.
- 111. Roof Construction.
- 112. Stereotomy.
- 113. History of the Development of Bridge Building—Secondary.
- 114. Water Power Development.
- 116. Engineering Jurisprudence.
- 128. Practical Astronomy.
- 129. Description of Work Done.
- 130. Critical Description of Engineering Construction.
- 131. Translation of Technical Engineering Works from French or German.
- 132. Any Primary in Theoretical and Applied Mechanics or Municipal and Sanitary Engineering.
- 133. Any Primary in Mathematics, Mechanical Engineering, or Electrical Engineering—Secondary.
- 134. Indexing of Civil Engineering Periodical Literature—Secondary.

COMMERCE

See under Economics and Materials of Commerce.

COMPARATIVE LITERATURE AND PHILOLOGY

Professors BARTON, MOSS, DODGE, OLIVER, Assistant Professor MEYER,
Dr. NEVILLE

- 1. GREEK LITERATURE.—From English readings. This course must be taken as Greek 14, which see.
- 2. LATIN LITERATURE.—From English readings. This course must be taken as Latin 12, which see.
- 3. DEVELOPMENT OF THE DRAMA.—(A)—Study of the Greek and Roman drama in English. *I.; Tu., Th.; 8; (2).* Professors MOSS and BARTON. (B)—Study of the English, French, and German drama in English. *II.; Tu., Th.; 8; (2).* Professors DODGE, OLIVER and Assistant Professor MEYER.
Required: One year of University work.
- 4. GENERAL INTRODUCTION TO THE SCIENCE OF LANGUAGE.—The

essential principles of the life and growth of language; outlines of the science of phonetics; classification of languages; characteristics of the various branches of the Indo-European family of languages; Indo-European phonology. *I.*; *Tu., Th.*; 6 (2). Dr. NEVILLE.

Required: Latin 3, Greek 4, German 1, or French 1.

6. HISTORICAL LATIN GRAMMAR.—Historical treatment of inflections and sounds of Latin in its relation to the other Indo-European languages. *II.*; *Tu., Th.*; 6; (2). Dr. NEVILLE.

Required: Latin 5; Philology 5.

7. HISTORY OF CLASSICAL PHILOLOGY.—*II.*; *M.*; 3; (1). Dr. NEVILLE.

Required: Latin 1; Greek' 4.

DAIRY HUSBANDRY

Professor FRASER, Mr. LEE, Mr. HAYDEN, Mr. HOPPER

1. MILK.—The character and composition of milk; practice in testing with the Babcock test, the lactometer, and the different acid tests; standardizing milk and cream; proper precautions to prevent contamination. Lectures, reference reading, and laboratory practice. *I.*; *second half; daily; 6, 7; Sat.*; 1, 2; (3). Mr. HAYDEN.

2. DAIRY CATTLE.—The principal characteristics of the dairy cow, special attention being given to dairy type and its bearing on economy of production. A study of the various breeds adapted to dairy purposes, their history and characteristics. Extensive practice in judging with reference to both dairy and breed standards. *I.*; *first half; daily; 1, 2; (2½)*. Mr. HOPPER.

7. FACTORY MANAGEMENT.—This course is designed especially for creamery butter makers, factory cheese makers, and others wishing a more extended course in butter and cheese making than is offered in the other courses. It includes the study of special problems connected with the manufacture of butter and cheese; the management of creameries and cheese factories under private and co-operative ownership; locating, planning, building, equipping, and operating plants; creamery and cheese factory sanitation and ventilation; factory accounting, duties of patrons of co-operative dairy enterprises; marketing of dairy products. Lectures, assigned readings and laboratory work. *II.*; *first half; daily; 3, 4; Sat.*; 1, 2, 3; (3). Mr. LEE.

Required: Dairy Husbandry 19, or 14.

8. CITY MILK SUPPLY.—Proper methods of handling and preparing milk and cream for direct consumption; preventing contamination of milk; pasteurizing, standardizing, bottling, transporting and delivering. Certified milk, value of milk as a food. Lectures, reference reading and laboratory work. *II.; first half; daily; 1, 2; (2½).* Mr. HAYDEN.

Required: Dairy Husbandry 1.

11. DAIRY BACTERIOLOGY.—The relation of bacteria to the dairy industry, showing where and to what extent milk may become contaminated during the process of milking and subsequently; also how this contamination may be largely avoided by proper methods. The effect of bacteria on milk and on the rapidity with which it sours after being produced under different degrees of cleanliness and held at different temperatures. The part that bacteria play in the manufacture of butter and cheese. *II.; second half; daily; 1, 2; (2½).* Mr. HAYDEN.

Required: Dairy Husbandry 1, and Botany 12.

12. INVESTIGATION AND THESIS.—Subject arranged with instructor. *(5, 10).* Professor FRASER.

14. CHEDDAR CHEESE.—Practice in ripening and setting milk; cutting, cooking, and dipping the curd; cheddaring, milling, maturing, and salting curds; pressing and curing cheese. *I.; first half; daily; 6, 7; Sat.; 1, 2, 3; (3).* Mr. LEE.

Required: Dairy Husbandry 1.

15. FANCY CHEESE.—The making and curing of different varieties, such as Swiss, Edam, Gouda, brick, cottage, etc. *II.; first half; daily; 6, 7; (2½).* Mr. LEE.

Required: Dairy Husbandry 1.

16. FEEDING AND CARE OF THE HERD.—Difference in the efficiency of individual cows; establishment of the dairy herd by selection and grading up with pure-bred sires; care and general management of the herd, together with the care and raising of calves. Fundamental principles of animal nutrition, compounding rations, practical work in feeding dairy cattle; construction, arrangement and care of dairy buildings. *I.; second half; daily; 1, 2; (2½).* Professor FRASER and Mr. HOPPER.

17. MANAGEMENT OF PURE-BRED HERDS.—This course is to meet the requirements of those students anticipating the care or ownership of registered herds of dairy cattle. Importance of environment and feed as factors in securing and maintaining improvement in

pure-bred dairy herds. Selection of sires and weeding out of females. A critical study of the important families and the performance of noted individuals in the various breeds, giving special attention to the law of heredity. *II.; second half; daily; 3; (2½).* Professor FRASER and Mr. HOPPER.

Required: Dairy Husbandry 2, 16.

18. DAIRY FARM MANAGEMENT.—Soiling and pasturing dairy cows; crops adapted to the dairy farm and best methods of converting these into milk; the place and value of the silo on the dairy farm and the best methods of handling and feeding ensilage; a study of the best and most economical systems of feeding; housing and general care of the herd; arrangement and care of dairy buildings and yards from a sanitary point of view. *II.; first half; daily; 3; (2½).* Professor FRASER.

Required: Dairy Husbandry 1, 2, 16. and one year of University work.

19. BUTTER MAKING.—A study of the different systems of creaming milk and a comparison of different cream separators as regards efficiency under varying conditions; pasteurization; the use of different kinds of lactic ferment, ripening cream, churning, working, packing and scoring butter. *I.; second half; daily; 6, 7; Sat.; 1, 2, 3; II.; second half; daily; 6, 7; Sat.; 1, 2, 3; (3).* Mr. LEE.

Required: Dairy Husbandry 1.

20. ELEMENTS OF MILK PRODUCTION.—Dairying in different countries. The influence of soil, climate, market conditions and location in determining special lines of dairy development. The present condition of dairying in the United States, its magnitude and relation to other lines of farming. Practice with hand separators and the application of the Babcock test. *I.; first half; daily; 6, 7; Sat.; 1, 2, 3; (3).* Mr. HAYDEN.

DRAWING, GENERAL ENGINEERING

Assistant Professor WILSON, Mr. MATTHEWS, Mr. WHITSITT,
Mr. VAWTER.

1. *Required of all engineering students.* Consists of: (a) Lettering—Plain free-hand lettering alphabets, off-hand lettering, and titles. Wilson's "Free-hand Lettering." (b) Elements of Drafting—Use of instruments, simple line exercises, geometrical construction, tracing and working drawings. (c) Sketching—Free-

hand dimensioned sketches of engineering details, time sketches and shop exercises. The three are accompanied by lecture courses upon the respective subjects. *I.; alternate days 1, 2, 3, or 6, 7, 8; (4).* Assistant Professor WILSON, Mr. MATTHEWS, Mr. WHITSITT, and Mr. VAWTER

2. DESCRIPTIVE GEOMETRY.—*Required of all engineering students.* Problems relating to the point, line and plane. The generation and the classification of lines and surfaces; tangent planes to surfaces of revolution, surfaces of single and double curvature, intersections and developments, accompanied by lectures, recitations and drawing room work. *Church's Descriptive Geometry. II.; Alternate days, 1, 2, 3, or 6, 7, 8; (4).* Assistant Professor WILSON, Mr. MATTHEWS, Mr. WHITSITT, Mr. VAWTER.

Required: General Engineering Drawing 1.

ECONOMICS¹

Professors KINLEY, ROBINSON, FISK, Assistant Professor WESTON, Mr. FIELD, Miss HERRON

The courses in economics include: General Economics, 1, 2, 3, 12, 16, 18, 20, 21, 101, 102; Economic History, 7, 22; Finance, 4, 5, 6, 8, 9; Commerce, 26, 27, 28, 29, 30, 31, 32, 35, 103; Industry and Transportation, 10, 11, 13, 14, 25; Statistics, 23, 24, 33, 34; Sociology, 15, 17. (See also English 21 and courses in Materials of Commerce.)

Courses 7, 22 and 26 are open to freshmen, without previous requirement; courses 101-104 are open to graduate students only; the other courses, except 7, 22, 26, are open to both graduate and undergraduate students.

1. PRINCIPLES OF ECONOMICS.—A beginners' course in underlying principles of the science, with some illustrations of their applications to social and economical problems. *I.; daily; 4; (5).* Professor KINLEY, Assistant Professor WESTON, and Mr. FIELD.

Required: At least 30 hours of University work.

2. PRINCIPLES OF ECONOMICS.—This course in general economics is offered primarily to students in the colleges of engineering and agriculture.

The course is offered each semester. In the first semester it is

¹These courses are described in greater detail in the circular on Courses of Training for Business.

open *only to juniors and seniors in engineering and agriculture*. As repeated in the second semester, its character is more general and it may be taken by juniors or seniors in any of the colleges or schools of the University. *I.; Tu., Th.; 4; for agricultural students, M., W., 8; (2)*. Professor ROBINSON and Assistant Professor WESTON. *II.; A, Tu., Th.; 4; B, W., F.; 6; (2)*. Assistant Professor WESTON and MR. FIELD.

3. MONEY AND BANKING.—The history and theory of money, credit and banking. *II.; M., W., F.; 4; (3)*. Assistant Professor WESTON.

Required: Economics 1.

4. FINANCIAL HISTORY OF THE UNITED STATES.—A study of colonial and federal finance, including currency, banking, tariff and fiscal questions, and a brief survey of the development of the financial systems of some of the leading states as New York and Illinois. *I.; M., W., F.; 2; (3)*. Assistant Professor WESTON.

Required: Economics 1.

5. PUBLIC FINANCE.—A study of public expenditures, financial administration, taxation and public debts. *II.; M., W., F.; 2; (3)*. Assistant Professor WESTON.

Required: Economics 1 and Political Science 1.

6. TAXATION.—A study of the theory and history of taxation and of special problems in taxation in the United States. For graduates and advanced students only. *I., II.; Tu., Th.; 2; (2)*. Assistant Professor WESTON.

Required: Economics 4 and 5.

7. ENGLISH ECONOMIC HISTORY.—Special attention is directed to the evolution of modern industrial institutions. *I.; Tu., Th.; 3; (2)*. MR. FIELD and MISS HERRON.

8. THE MONEY MARKET.—An advanced course dealing with rates of exchange, functions of bill broker and banker, causes of fluctuations in rates of discount, the concentration of financial dealings at such centers as New York and London, international payments and the determination of rates of foreign exchange. *II.; Tu., Th.; 3; (2)*. Assistant Professor WESTON.

Required: Economics 3.

9. BANKING.—A course in the study of practical banking, with special reference to the United States, England, Germany, France and the Orient. *I.; Tu., Th.; 3; (2)*. Assistant Professor WESTON.

Required: Economics 3.

10. CORPORATION MANAGEMENT AND FINANCE.—The growth of corporations; their organization and securities, position and relations of stockholders and directors, analysis of reports, stock speculation, relation of industrial corporations to international competition, receiverships and reorganizations, social and political effects. *I.; M., W., F.; 3; (3).* Professor ROBINSON.

Required: Economics 1, or 2 and 7, or 22.

11. INDUSTRIAL CONSOLIDATIONS.—The development of industrial consolidations, their causes and forms; the promotion, financiering, incorporation and capitalization of corporate consolidations; monopoly prices and monopoly methods; the ability of trusts to affect prices, wages, interest and profits; and the proposed plans for controlling trusts, such as publicity, taxation of profits, and public ownership. *II.; M., W., F.; 3; (3).* Professor ROBINSON.

Required: Economics 10.

12. THE LABOR PROBLEM.—The labor movement and its social significance. The progress of the laboring classes, strikes, arbitration, labor organizations, and similar topics, which are studied, show the general character of the course. *I.; W., F.; 4; (3).* Professor KINLEY or Mr. FIELD.

Required: Economics 1, or 2 and 7 or 22.

13. RAILWAY MANAGEMENT.—This course considers from the administrative standpoint railways as factors in the social and industrial development of the United States and treats of the following topics:—(1) Historical: conditions of commerce and industry previous to the advent of the railways; primitive methods of transportation, etc.; (2) Geographical: the economic location of railways, etc.; (3) Organization: charter and franchises; capital stock; directors and stockholders; departments; the distribution of authority and responsibility; (4) Traffic management; (5) Financial: basis of capitalization; use of stocks and bonds; stock watering; distribution of earnings; reports and their interpretation, etc.; (6) Legal: rights and duties of railways; their status under the common and statute law; relation to leased lines; to employes; to patrons; taxation; public control through commissions. *I.; M., W., F.; 4; (3).* Professor ROBINSON.

Required: Economics 1, or 2 and 7, or 22. From junior and senior engineers Economics 2, only, will be required.

14. RAILWAY SYSTEMS.—This is a continuation of course 13. *II.; M., W., F.; 4; (3).* Professor ROBINSON.

Required: Economics 13.

15. CHARITIES AND CORRECTION.—This course deals with the causes of pauperism and crime, with the study of institutions for the care of dependents, and similar topics. *I.; Tu., Th.; 2; (2).* Mr. FIELD.

Required: At least 28 hours of University credit.

16. ECONOMIC PROBLEMS.—Section A, consisting of engineers, takes up the study of railway problems, taxation of corporations, and the labor question. Section B, composed of household science students, studies such subjects as expenditure and consumption, household budgets, certain aspects of the labor question and the elements of accounting. Section C, composed of students from the College of Agriculture, takes up special topics relating to agriculture. *II.; Tu., Th.; (2).* *Section A, 4.* Professor ROBINSON; *Section B, 4.* Miss HERRON; *Section C., M., W.; 8;* Assistant Professor WESTON.

Required: Economics 1, or (*for agricultural and engineering students*) 2.

17. SOCIOLOGY.—This course deals with the principles underlying social organization and with the nature and development of social institutions. Special attention is devoted to the study of the family, the state and to the subject of race assimilation in the United States. The latter part of the course is devoted to problems of social disintegration, particularly crime and pauperism. *II.; M., W., F.; 1; (3).* Mr. FIELD.

Required: At least 28 hours of University credit. [Not given in 1905-06.]

18. ECONOMIC SEMINARY.—For investigation and for the study of current economic literature. *I, II; arrange time (4-8 for the year).* Professor KINLEY and the other instructors in the department.

20. HISTORY OF ECONOMIC THOUGHT.—The history of the development of economic theory since the sixteenth century. *I., II.; 7; (2).* Professor KINLEY.

Required: Ten hours in economics.

21. SOCIALISM AND SOCIAL REFORM.—*II.; M., W., F.; 7; (3).* Mr. FIELD.

Required: Economics 1, or 2 and 7.

22. THE ECONOMIC HISTORY OF THE UNITED STATES.—An inquiry into the trend of our development and into the physical, economic, and political forces which have directed and controlled it. Attention is given to the history of some specific great industries. *II.; Tu., Th.; 3; (2).* Professor ROBINSON.

24. STATISTICS.—Those who do not wish the mathematical theory of probability may drop out of the class when that part of the subject is reached. For them the mathematical requirement for entrance is not enforced, and the course counts for three hours' credit. All who take the course must take both parts of it, as described under mathematics 26, which see.

25. PUBLIC CONTROL OF TRADE AND INDUSTRY.—An economic and financial study of the practical results of the public regulation of private business enterprises, and the public control, ownership, and operation of public service corporations such as street railways, water works, gas and electric light plants, docks, and markets. *I.; Tu., Th.; 3; (2).* Professor ROBINSON.

Required: Economics 1, or 2 and 7, or 22. [Not given in 1905-6.]

26. COMMERCIAL GEOGRAPHY.—A brief study of the various natural and artificial conditions which affect commercial and industrial development, followed by a somewhat detailed consideration of the more important products and industries of the different countries, with special reference to the domestic and foreign commerce of the United States. *I., II.; Tu., Th.; section A, 6; section B, 7; (2).* Professor FISK.

This course should be taken with physiography.

27. HISTORY OF COMMERCE.—A general survey of ancient, medieval and modern commerce, with special stress on the commercial policy of Europe during the last century. This may be advantageously taken in connection with economics 30. Both courses are given during 1905-06 and every other year thereafter, alternating with economics 28 and 29. *I.; M., W., F.; 6; (3).* Professor FISK.

Required: Economics 1, 7, 26, and after 1905-06, History 1.

28. DOMESTIC COMMERCE AND COMMERCIAL POLITICS.—This course on internal trade includes a comparative study of the various forms of commercial organization, such as general wholesale and retail trade, department, coöperative, and company stores, peddling, huckstering and hawking, booths, auctions, commercial agents, in-

cluding commercial travelers, and the coupon system. Other subjects considered are markets and fairs, stock and produce exchanges, trade companies, commercial and technical schools, etc. *I.; M., W., F.; 6; (3).* Professor FISK.

Required: Same as Economics 27. [Not given in 1905-1906.]

29. FOREIGN COMMERCE AND COMMERCIAL POLITICS.—Continuation of course 28, but may be taken separately. A study of the various commercial systems (mercantile, free trade, and protective); kinds of tariffs; commercial treaties, including premiums, reciprocity and most favored nations relations; commercial statistics and balances; institutions for furthering export trade (commercial museums and bureaus of information, sample houses, consular reports, etc.). *II.; M., W., F.; 6; (3).* Professor FISK.

Required: Same as Economics 27. [Not given in 1905-06.]

30. HISTORY OF THE COMMERCIAL POLICY OF THE UNITED STATES AND OF EUROPE DURING THE 19TH CENTURY.—This course includes an historical study of all those measures, such as tariff legislation, commercial treaties, laws regulating coastwise navigation, tonnage duties, reciprocity arrangements, bounties, subsidies, consular matters, etc., which have an important bearing on the commercial side of the foreign relations of the above named countries. *II.; M., W., F.; 6; (3).* Professor FISK.

Required: Economics 1, 7, 22, 26 and after 1905-06 a course in modern European history and the history of the United States.

31. HISTORY OF THE COMMERCIAL RELATIONS OF THE UNITED STATES—This comprises a study of the general trade relations of the United States with foreign countries, as well as a more detailed consideration of our commercial relations with certain countries. For 1905-06 the subject for special study will be our economic relations with the countries of the far East (China, Japan, and Russia), or of Great Britain, according to the desires of the members of the class. It is desirable, though not required, that this course be taken in connection with 35. *I., II.; M., W.; 7; (2).* Professor FISK.

Required: Economics 1, 7, 26 and, after 1905-6, 27 and 30.

32. DOMESTIC AND FOREIGN MARKETS OF THE UNITED STATES.—One hour a week is devoted to a study of the distribution and domestic marketing of American products, especially farm products, while the second hour is given to a study of foreign markets for American exports. The aim in the latter will be to consider how we may most advantageously develop our present foreign markets and

open up new fields for American products. It is desirable, though not required, that this course be taken with 35. *I., II.; W., F.; 7; (2).* Professor FISK.

Required: Economics 27 and 30 or 28 and 29. (Not given in 1905-06.)

33. **ECONOMICS OF INSURANCE.**—The historical development of insurance, and an extended discussion of its economic aspects. The various forms of insurance,—fire, accident, employment and life,—from the standpoint of internal organization and from that of social service. Rates, policies, investments, corporate management, accounting, public supervision, and insurance law. *I.; Tu., Th.; 3; (2).* Professor ROBINSON.

Required: Economics 1, or 2 and 7, or 22.

34. **CORPORATION ACCOUNTING.**—The general principles of accounting and auditing in modern business. The reports of railway, banking and industrial corporations are analyzed. The work is supplemented with a series of lectures by practical accountants. *II.; Tu., Th.; 7; (2).* Professor ROBINSON.

Required: Economics 10.

35. **CONSULAR AND DIPLOMATIC SERVICE.**—The basis of this course is the consular and diplomatic regulations of the United States. Some attention, however, is paid to the foreign service of other important countries. It is desirable, though not required, that this course be taken with 31 or 32. *I., II.; F.; 7; (1).* Professor FISK.

Required: Economics 1, 7 and 26.

40. **BIBLIOGRAPHY OF HISTORY AND THE SOCIAL SCIENCES.**—A study of the literature of the subjects rather than of the subjects themselves. The history of thought in the subjects, as a part of the progress of culture, is traced in a brief way. Works representative of various periods and phases of the subject are assembled, and the masterpieces of each period are discussed in some detail. Each student is required to prepare a list of books on an assigned topic suited to the conditions of a selected community. *I.; arrange time; (1).* Various instructors.

COURSES FOR GRADUATES

All the courses above described except 1, 2, 7, 22, 26, and 40, may be taken as graduate work.

101. **RECENT ECONOMIC THEORY.**—Different topics are taken up and discussed from year to year, as time allows. For the year

1905-6 the subject of study is Theories of Wages and Profits. *I., II.; arrange time; (2 to 4).* Professor KINLEY.

103. SEMINARY IN RAILWAY ADMINISTRATION.—Advanced students in this subject make a detailed study of one of the branches of railway administration. *I., II.; arrange time; (2).* Professor ROBINSON.

104. SEMINARY IN COMMERCE.—A study of present international commercial relations, with special reference to the trade conditions of the United States and the extension of her trade to foreign markets. *I., II.; arrange time; (2).* Professor FISK.

EDUCATION

Professor DEXTER.

1. PRINCIPLES OF EDUCATION.—The basis for a scientific theory of education, critically considered, from the standpoint of the individual in his relation to the mass. The more general problems of genetic psychology are studied, as well as those essential to the theory and art of teaching. The problems of school education. The making of a course of study. Method in teaching. The recitation. Examinations. Grading and promotion. The various branches, considered as school subjects. *I.; daily; 2; (5).* Professor DEXTER.

Required: Two years of University work.

2. HISTORY OF EDUCATION.—The development of educational theory and practice in their relation to the history of civilization. The educational problems of the earliest culture nations. The early Christian schools. Significance of scholasticism. The growth of the universities. The Reformation and its results. The lives and influence of the great educators. *II.; daily; 2; (5).* Professor DEXTER.

Required: Two years of University work.

3. GENERAL METHOD.—Application of the principles of education to the art of teaching. *I.; M., W., F.; 3; (3).* Mr.

4. CONTEMPORARY EDUCATIONAL CONDITIONS AND MOVEMENTS IN THE UNITED STATES.—The educational tendencies of to-day. Besides the broader meaning of the whole movement, the school systems of our larger cities and towns are carefully studied. *I.; Tu., Th.; 4; (2).* Professor DEXTER.

Required: Education 1 or 2.

5. A COMPARATIVE STUDY OF THE SECONDARY SCHOOLS OF FRANCE, GERMANY, ENGLAND, AND AMERICA.—The French Lycées,

the German Gymnasias, the English Board, Public, and Church Schools, and the American Academies and High Schools. *II.*; *Tu., Th.*; 4; (2). Professor DEXTER.

Required: Education 1 or 2.

6. HIGH SCHOOL ORGANIZATION AND MANAGEMENT.—A discussion of the essential elements of a good high school, together with a consideration of the conditions existing in Illinois; proposed solutions of the many problems of secondary education; desired lines of progress; building up of an accredited high school; equipment; program making; courses of study; electives; discipline. *II.*; *M., W., F.*; 7; (3). Professor DEXTER.

7. SPECIAL METHODS IN SCIENCE AND MATHEMATICS.—Position of science in the curriculum; discussion of general methods in science; special methods with reference to botany, zoology, physics, chemistry, and other sciences, in so far as time will allow; laboratory equipment; purchasing of apparatus; selection and use of material; use of laboratory manuals; text-books; discussion and illustration of methods in algebra and geometry. *I.*; *Tu., Th.*; 3; (2). Mr.

Required: Education 1.

8. SPECIAL METHODS IN LANGUAGE AND HISTORY.—The application of the general principles of method to the teaching of language and history; special methods in English composition and rhetoric and the English classics required for admission to the University; methods in language teaching, especially Latin and German; content and method in history teaching. *II.*; *Tu., Th.*; 7; (2). Mr.

Required: Education 1 and three years of University work.

9. PSYCHOLOGY APPLIED TO THE ART OF TEACHING.—A brief course in genetic psychology, together with a critical study of the mental processes of sense perception, the formation of concepts, attention, suggestion, and imitation in their relation to the teaching process. *II.*; *M., W.*; 4; (2). Professor DEXTER.

Required: Two years of University work.

10. SEMINARY IN EDUCATION.—The subject for 1905-1906 is *School Supervision*. The problems of the modern city superintendent from both the educational and business standpoints will be considered. Special attention is given to the problems of school architecture and sanitation. Discussions, reports, and lectures by those actively engaged in the work of superintendency. *I., II.*; *arrange time*; (1). Professor DEXTER.

Special courses for teachers are offered in other departments of the University. Students electing these courses are expected to have had Education 1 or its equivalent. For description, see English 15, German 13, Latin 9, Rhetoric 8, Zoölogy 9.

COURSES FOR GRADUATES

Advanced work is offered in the history and philosophy of education. Experimental and statistical problems in education and child study are also directed.

ELECTRICAL ENGINEERING.

Professor MORGAN BROOKS, Assistant Professor WILLIAMS, and Mr. BRYANT

I. ELECTRICAL ENGINEERING.—Lectures and recitations accompanying Elec. Eng'g 21, laboratory practice; for students in mechanical engineering. Principles of electrical machinery; selection, installation and operation; distribution of power; motor applications. *II.; Tu., Th.; 1; (2).* Mr. BRYANT.

Required: Phys. 1 and 3, Math. 9.

2. ELECTRICAL ENGINEERING.—Lectures and recitations accompanying Elec. Eng'g. 26, laboratory practice; for students in civil engineering. Similar to Elec. Eng'g 1. *I.; Tu., Th.; 4; (2).* Mr. BRYANT.

Required: Phys. 1 and 3, Math. 9.

4. TELEGRAPHY AND TELEPHONY.—Fundamental principles of electrical signaling with illustrations from modern telegraphic methods. Wireless telegraphy. Theory of the telephone; commercial instruments; switching methods. Line construction. *I.; Tu., Th.; 1; (2).* Professor BROOKS.

Required: Phys. 4, Elec. Eng'g 16.

5. ALTERNATING CURRENTS.—A mathematical and graphical treatment of the principles of periodic currents, with theory of the transformer. Application of theory in generators, motors, and transformers. *I.; M., W., F.; 1; (3).* Professor BROOKS.

Required: Elec. Eng'g 16, Phys. 4.

9. LIGHTING.—For architects. Electric lamps and other illuminants, and their effective use. Interior wiring. Methods of electrical distribution. *II.; Tu., 3; (1).* Professor BROOKS.

11. POWER PLANTS.—Principles governing location of electric power plants, both steam and hydraulic. Economical transmission

distance. Selection and installation of generating units; management and testing of complete plants. *II.; F.; 1; (1)*. Assistant Professor WILLIAMS.

Required: Elec Eng'g 5 and 15.

12. ELECTRO-CHEMISTRY.—Theory and application upon an engineering scale of electrolysis and heat in the manufacture of metals and other products. The electric furnace. Storage battery engineering. *I.; W., F.; 3; (2)*. Professor BROOKS.

13. SEMINARY.—A weekly meeting for the discussion of topics from current periodicals, and of scientific papers, including advance copies of transactions of American Institute of Electrical Engineers. *I.; Th.; 6, 7; (1); II.; Th.; 2, 3; (1)*. *I.* Assistant Professor WILLIAMS. *II.* Professor BROOKS.

Required: Elec. Eng'g 16.

14. ADVANCED ALTERNATING CURRENTS.—Development of the Steinmetz symbolic method, and application to single and polyphase machinery. *II.; Tu., Th.; 1; and F., 2 for 12 weeks; (2)*. Professor BROOKS.

Required: Elec. Eng'g 5.

15. ELECTRIC DISTRIBUTION.—Economic arrangement of electric circuits; line construction, overhead and underground; interior wiring; effective lighting. *I.; M., W., F.; 4; (3)*. Assistant Professor WILLIAMS.

Required: Elec. Eng'g 16.

16. DYNAMO-ELECTRIC MACHINERY.—Theory of the magnetic circuit and of flux. Fundamental principles of dynamos and motors; application of these principles, including alternating current machinery. *I.; section G, M., W., F.; 1; section H, M., W.; 1; F.; 2; (3)*. Assistant Professor WILLIAMS. *II.; section G, M., Th., F.; 1; W.; 3; section H, M., F.; 1; W., 3; Th.; 4; (3)*. Professor BROOKS and Assistant Professor WILLIAMS.

Required: Phys. 1 and 3, Math. 9.

17. TRACTION.—Theory of grades, curves and speeds as affecting train resistance. Application of electric motors to the problem of electric traction, with illustrations from electric railways. *II.; M., W.; 1; (2)*. Assistant Professor WILLIAMS.

Required: Theo. and Applied Mech. 8, 9 and 10, and Elec. Eng'g 16 and 5.

21. ELECTRICAL ENGINEERING LABORATORY.—For students in mechanical engineering. Illustrations of principles of dynamo ma-

chinery. Operation and care of dynamos, motors, and transformers. *I.*; 6, 7, 8; *section A1, M.*; *section A2, W.*; *section B1, Th.*; *section B2, F.*; (2). Assistant Professor WILLIAMS and Mr. BRYANT.

Required: Elec. Eng'g 1.

22. ELECTRICAL ENGINEERING LABORATORY.—Experimental study of direct current dynamos and motors; use of measuring instruments; operation of electric machinery; complete tests similar to those made by dynamo manufacturers. *II.*; 6, 7, 8; *section G1, F.*; *section G2, W.*; *section H1, Tu.*; *section H2, Tu.*; (2). Assistant Professor WILLIAMS and Mr. BRYANT.

Required: Elec. Eng'g 16.

23. ELECTRICAL ENGINEERING LABORATORY.—Study of alternating current instruments, dynamos, motors and transformers; regulation, efficiency, temperature and insulation tests. *I.*; 6, 7, 8; *section G1, M.*; *section G2, Tu.*; *section G3, F.*; (1½). Assistant Professor WILLIAMS and Mr. BRYANT.

Required: Elec. Eng'g 16 and 22.

24. ELECTRICAL ENGINEERING LABORATORY.—Advanced direct and alternating current testing; problems in transmission line losses; polyphase operation. *II.*; 6, 7, 8, 9; *M., Tu., or Th.*; (2). Assistant Professor WILLIAMS and Mr. BRYANT.

Required: Elec. Eng'g 23.

26. ELECTRICAL ENGINEERING LABORATORY.—For students in civil engineering; similar to Elec. Eng'g 21, *I.*; *W.*; 2, 3, 4; *or S.*; 1, 2, 3; (2). Mr. BRYANT.

Required: Registration in Elec. Eng'g 2.

27. ELECTRICAL ENGINEERING LABORATORY.—Photometry; testing of telegraph and telephone instruments and lines. *I.*; *lecture, F.*; 2; *laboratory, 2, 3*; *section G1, Th.*; *section G2, M.*; and *section G3, Tu.*; (1½). Mr. BRYANT.

Required: Elec. Eng'g 16.

28. ELECTRICAL ENGINEERING LABORATORY.—A short course in laboratory practice, similar to Elec. Eng'g 21, intended for municipal and sanitary engineers. *I.*; *F.*, 6, 7; (1). Mr. BRYANT.

Required: Elec. Eng'g 1.

32. ELECTRICAL DESIGN.—Calculation and design of electromagnets and of dynamos direct and alternating, and of transformers. *I.*; *section G1, F.*, 6, 7, 8, and *M.*, 2, 3; *section G2, M.*, 6, 7, 8,

and Tu., 2, 3; section G3, Tu., 6, 7, 8, and Th., 2, 3; (2). Professor BROOKS.

Required: Elec. Eng'g 16 and Phys. 4.

33. ELECTRICAL DESIGN.—Drawings and specifications for a complete plant, or design for a switchboard and distribution system. *II.*; section G1, M., 2, 3, 4; section G2, W., 2, 3, 4; (1). Assistant Professor WILLIAMS.

Required: Elec. Eng'g 5 and 15.

35. THESIS.—Preliminary reading and investigation is done during the first semester without special assignment of credit; the credit granted the second semester often does not duly cover the time devoted to thesis work. Subject must be chosen and approved before the first Monday in November. *II.*; *time as assigned*; (3). Professor BROOKS and Assistant Professor WILLIAMS.

COURSES FOR GRADUATES

Primary

101. Theory of Alternating Currents.
102. Dynamo-Electric Machinery.
103. Alternating Current Machinery.
104. Electrical Transmission of Power.
105. Electric Light and Power Plants.
106. Electro-Metallurgy.
107. Polyphase Testing.
108. Electrical Engineering Research.
109. Electrical Design.
111. Theory of Equations.
112. Theory of Determinants.
113. Least Squares.
114. Differential Equations.
115. Calculus of Variations.
116. Spherical Harmonics.
117. Potential Function.
118. Advanced Physical Measurements.
119. Mathematical Physics.
120. Mathematical Theory of Electricity and Magnetism.
121. Physical Chemistry.
122. Metallurgical Chemistry.
123. Electro-Chemistry.

ENGLISH LANGUAGE AND LITERATURE

Professor DODGE, Assistant Professor BALDWIN, Mr. SCOTT, Miss PILLSBURY.

1. SELECT PERIODS OF ENGLISH LITERATURE.—*I.*; *section A*, 1; *section B*, 2; *section C*, 4; *section D*, 6; *section E*, 8; (4). Assistant Professor BALDWIN, Mr. SCOTT, and Miss PITTS. (This course is followed in the second semester by English 27.)

3. NINETEENTH CENTURY POETRY.—*I.*, *II.*; *M.*, *W.*, *F.*; 3; (3). Miss PILLSBURY. (The second semester may not be taken by itself.)

Required: English 1.

4. PROSE WRITERS OF THE SIXTEENTH AND SEVENTEENTH CENTURIES.—Professor BALDWIN.

Required: English 1. [Not given in 1905-1906.]

4a. NON-DRAMATIC POETRY OF THE SIXTEENTH AND SEVENTEENTH CENTURIES.—*I.*, *II.*; *Tu.*, *Th.*; 3; (2). Assistant Professor BALDWIN.

Required: English 1.

5. SHAKSPERE AND HISTORY OF THE DRAMA.—Primarily for graduates. *I.*, *II.*; *M.*, *W.*, *F.*; 2; (3). Professor DODGE.

Required: English 1 and either 3, 4a or 23. (The second semester may be taken without the first.)

6. HISTORY OF ENGLISH CRITICISM.—Primarily for graduates. *I.*, *II.*; *Tu.*, *Th.*; 2; (2). Mr. SCOTT.

Required: English 1, 3 and 4a.

7. ENGLISH FICTION.—*I.*, *II.*; *Tu.*, *Th.*; 3; (3). Miss PILLSBURY.

Required: At least 8 hours of English.

8. OLD ENGLISH (ANGLO-SAXON) GRAMMAR AND PROSE.—*I.*, *II.*; *M.*, *W.*, *F.*; 4; (3). Professor DODGE.

Required: At least 8 hours of English.

14. THE OLD ENGLISH CHRONICLE.—Special course for students of politics, economics, and history. As an introduction to the course, Old English Grammar is studied, so far as is necessary for a proper understanding of early phraseology. Primarily for graduates, but open to undergraduates having sufficient preparation. *I.*; *Tu.*, *Th.*; 3; (2). Professor DODGE.

Required: One year of history, economics, sociology, or English Literature. (Not given in 1905-1906.)

15. SEMINARY: METHODS OF ENGLISH TEACHING.—Open to senior and graduate students. *I.*, *II.*; *IV.*; 8; (1). Professor

DODGE, Assistant Professor BALDWIN, Miss PILLSBURY and Mr. SCOTT.

(The second semester may be taken without the first.)

16. HISTORY OF AMERICAN LITERATURE.—*I.*; *M., W., F.*; *section A, 2; section B, 6; (3).* Miss PILLSBURY.

17. HISTORY OF THE ENGLISH LANGUAGE.—Elementary course. *I., II.*; *Tu., Th.*; 4; (2). Professor DODGE.

19. THE LITERARY STUDY OF THE BIBLE.—*I., II.*; *M., W., F.*; 3; (3). Assistant Professor BALDWIN.

Required: Eight hours of English Literature.

20. EIGHTEENTH CENTURY POETRY.—*II.*; *M., W., F.*; 1; (3). *Required:* English I or equivalent. (Not given in 1905-1906.)

21. SOCIAL IDEALS IN ENGLISH LITERATURE OF THE NINETEENTH CENTURY.—*II.*; *M., W., F.*; 1; (3).

Required: Eight hours of English Literature.

23. ELEMENTARY COURSE IN SHAKSPERE.—Introductory to English 5. *II.*; *M., W., F.*; *section A, 4; section B, 6; section C, 7; (3).* Mr. SCOTT.

Required: English I.

24. BROWNING, RAPID CRITICAL READING.—*I.*; *M., W., F.*; 4; (3). Miss KYLE.

Required: Eight hours of English Literature.

25. CHAUCER, CRITICAL READING OF THE PRINCIPAL POEMS.—*I.*; *Tu., Th.*; 2; (2). Professor DODGE.

Required: Eight hours of English.

26. ENGLISH BALLADS.—*II.*; *Tu., Th.*; 2; (2). Professor DODGE.

Required: Eight hours of English.

27. PROSE WRITERS OF THE NINETEENTH CENTURY.—*II.*; *section A, 1; section B, 2; section C, 4; section D, 6; section E, 8; (4).* Mr. SCOTT, Miss PILLSBURY.

Required: English I.

COURSES FOR GRADUATES

101. RESEARCH WORK IN ELIZABETHAN LITERATURE.—Professor DODGE and Assistant Professor BALDWIN.

102. EIGHTEENTH CENTURY WRITERS.—Special investigations. Professor DODGE and Mr. SCOTT.

103. NINETEENTH CENTURY LITERATURE.—Investigation of special problems. Miss PILLSBURY and Mr. SCOTT.

See also Comparative Literature and Philology.

ENTOMOLOGY

Professor FORBES, Dr. FOLSOM

1. ELEMENTARY ENTOMOLOGY.—This course, open to all matriculated students, is complete in itself, but leads to the courses in general entomology. (Entomology 2 and 3.) The field and laboratory work is strictly entomological, but the lectures are largely upon general biology, with entomological illustrations. The subject is taught in part with a view to giving the prospective teacher of zoology command of entomological material for illustrative purposes. *I., II.; Tu., Th.; 6, 7; (2).* Dr. FOLSOM.

2. GENERAL ENTOMOLOGY.—This course and Entomology 3 form a year's connected major work in entomology, covering substantially the whole field. The present course is devoted mainly to field entomology in the fall and later to the morphological and physiological aspects of the subject. Beginning with the collection and preservation of specimens and the making of field observations, it is continued by laboratory studies of typical insects, made with special reference to the recognition of adaptive structures, and experimental work intended to determine their exact utilities. *I.; 3, 4; (5).* Dr. FOLSOM.

Required: Zoology 10 or 1a, or Entomology 1 or 4.

3. GENERAL ENTOMOLOGY.—To be taken either with or without the preceding course. The classification and determination of insects, the study of life histories in the insectary and by field observation, and the collection of information with respect to the œcological relations of insects, are the principal objects of this course. *II.; 3, 4; (5).* Dr. FOLSOM.

Required: Zoology 10 or 1a, or Entomology 1.

4. INTRODUCTION TO ECONOMIC ENTOMOLOGY.—Intended especially for students in the College of Agriculture. A lecture, field, and laboratory course acquainting the student with the general principles and essential elements of economic entomology. This course may be followed by one or more special courses corresponding to the subdivisions of the departments of agriculture and horticulture, and to be taught in connection with them. *I.; first half; 1, 2; (2½).* Professor FORBES and Dr. FOLSOM.

5. ADVANCED ENTOMOLOGY.—Under this head students desiring advanced work in entomology, especially as a preparation for thesis work in this subject, will be individually provided for on consultation with the entomological instructors. The course may be made

to cover one or two semesters and to earn a three-hour or a five-hour credit in each. At least a three-hour course for one semester will be required as a preparation for entomological thesis work. *I., II.; arrange time; (3 to 5 each semester.)* Professor FORBES or Dr. FOLSOM.

Required: Entomology 2, 3, or 4.

6. THESIS INVESTIGATION.—Students specializing in entomology will select a thesis subject, preferably during the junior year. They will be expected to give three hours a day to investigation upon it, under the supervision of an instructor, during their senior year. *I., II.; arrange time; (5).* Professor FORBES and Dr. FOLSOM.

Required: At least a three-hour course in Entomology 5.

7. SYSTEMATIC ENTOMOLOGY.—This course, while primarily entomological, is designed to be of general use to students of biology. The lectures include a historical and critical survey of the systems of classification; a discussion of the aims and methods of classification; the nature of species, genera, and other groups, and the rules of nomenclature; the preparation of taxonomic articles, involving the study of bibliography, synonymy, analytical keys, etc. These subjects receive practical treatment in the laboratory, and to qualified students the unworked material of the State Laboratory of Natural History is available for study. *I., II.; arrange time; (3 each semester).* Dr. FOLSOM.

Required: A semester course in Zoology or Entomology.

COURSES FOR GRADUATES

Entomology 2, 3, 5, 6, and 7 may be taken as graduate courses.

FRENCH

Professor OLIVER, Dr. JONES, Mr. HAMILTON

1. ELEMENTARY COURSE.—Grammatical study. Drill in pronunciation. Reading of simpler modern authors, with exercises in composition and conversation. *I., II.; section A, 1; section B, 2; section C, 3; section D, 4; section E, 6; section F, 7; (4)* Professor OLIVER, Dr. JONES, and Mr. HAMILTON.

2. MODERN PROSE, POETRY AND DRAMA.—Rapid reading of representative modern authors. Advanced syntax and composition. Conversation and reports on collateral reading. Outlines of French

literature. *I., II.; section A, 3; section B, 6; (4).* Professor OLIVER and Mr. HAMILTON.

Required: French 1.

3. ADVANCED PROSE, COMPOSITION AND CONVERSATION.—This course may be taken alone, or more profitably with any course higher than French 2. It is especially designed for students in the courses in business, training and for those intending to teach French. *I., II.; Tu., Th.; 2; (2).* Professor OLIVER.

Required: For students in the courses in business training, French 1; for other students, French 2.

7. MOLIERE.—Study of the life and times of Molière, with reading of the greater comedies. *I.; Tu., Th.; 2; (2).* Mr. HAMILTON.

Required: French 2. [Not given in 1905-1906.]

8. TRAGEDY OF THE CLASSIC SCHOOL.—Rise, development and decline of Classic Tragedy as seen in the works of Corneille, Racine and Voltaire. *II.; Tu., Th.; 2; (2).* Mr. HAMILTON.

Required: French 2. [Not given in 1905-1906.]

9. NON-DRAMATIC LITERATURE OF THE SEVENTEENTH CENTURY.—Lectures on the culture and society of France in the seventeenth century as expressed in literature not dramatic. The great moralists, preachers and philosophers. Memoirs and Letters. The Art Poétique and the Satires of Boileau. The fables of La Fontaine. *I., II.; M., W., F.; 4; (3).* Professor OLIVER.

Required: At least twenty hours of French. [Not given in 1905-1906.]

11. THE LYRIC POETRY OF FRANCE.—Rise and growth of lyric poetry in France. The chief emphasis falls upon Victor Hugo, although the poets previous to Hugo and also his contemporaries receive attention. The principles of French versification are studied and illustrated, particularly in examples of Victor Hugo's poems. *I., II.; Tu., Th.; 3; (2).* Dr. JONES.

Required: Twenty hours of French. [Not given in 1905-1906.]

12. REALISTIC FICTION.—This course has Balzac as its central theme, and studies in detail of the development of French realistic fiction. *I., II.; Tu., Th.; 3; (2).* Dr. JONES.

Required: Twenty hours of French.

13. LITERATURE OF THE EIGHTEENTH CENTURY.—Lectures on the society and culture of the eighteenth century in France. Break-up of the ideals of Classicism. Growth of the revolutionary spirit. First movements toward Romanticism. Montesquieu, Voltaire and

the Encyclopedists, Rousseau, Didtrot, Le Sage and the writers of the Revolution. The drama of the century. *I., II.; M., W., F.; 4; (3).* Professor OLIVER.

Required: French 2.

14. FRENCH DRAMA.—A survey of French drama from the 17th century with especial emphasis upon the drama of the latter part of the 19th century and upon contemporary authors. Lectures, class interpretation, collateral reading and essays. *I., II.; M., W., F.; 2 (3).* Professor OLIVER.

Required: French 2.

For courses in Comparative Drama and in the Science of Language see Comparative Literature and Philology.

COURSES FOR GRADUATES

Graduate students may pursue special courses under the direction of the head of the department. These courses will treat of the language and literature of the sixteenth century, of the history of Old French literature, and of the Historical Grammar of French and the other Romance Languages. In case the number of students be sufficient, a Seminar Course will be formed to meet their needs.

Students intending to qualify as teachers of French should take courses in the Historical Grammar of the French language.

GEOLOGY

Professor ROLFE, Mr. FOX, and Mr. JONES

Students expecting to specialize in geology should take courses numbered 5, 1, 2, 6, 7, 8, 9, 4, in the order named, except that 4 should run parallel with 8 and 9.

1. DYNAMIC AND HISTORIC GEOLOGY.—Dynamic and historic geology. Laboratory exercises in petrography and palaeontology.

a. Dynamic Geology. The forces now at work upon and within the earth's crust, modeling its reliefs, producing changes in the structure and composition of its rock masses and making deposits of minerals and ores. A series of localities is studied in which great surface changes have recently taken place, with a view to ascertaining the character of the forces producing such changes, and the physical evidence of the action of like forces in the past.

b. Petrography of Fragmental Rocks. A laboratory study of fragmental rocks, following the same lines as indicated under 5b.

c. Historical Geology. Substantially an introduction to the history of geology. Especial stress is laid on the development of the North American continent.

d. Paleontology. The scheme of instruction in this subject places before the student the classification adopted for those organic forms occurring as fossils, together with the succession of the various groups in the strata, with the cause, as far as known, for their appearance and disappearance. The student is required to familiarize himself with selected groups of paleozoic fossils, abundant illustrations of which are placed in his hands. *II.; I, 2; (5)*. Professor ROLFE and Mr. Fox.

Required: Geology 5.

2. ECONOMIC GEOLOGY.—A study of the uses man may make of geologic materials; of the conditions under which they occur; and of the qualities which make them valuable. Readings, conferences and laboratory work. Each student may, with the approval of the head of the department, select one or more of the subjects indicated below and devote to it as much time as may seem desirable and profitable. The proportion of time devoted to reading, conference and laboratory will of course vary with the nature of the subject chosen. The new laboratory affords facilities for making the work thoroughly practical.

The subjects from among which students may elect for the purpose of special investigation, are as follows:

Ores and ore deposits; useful minerals other than ores, mineral synthesis. Petrographic studies, properties of clays, which fit them for various uses. Properties of lime and cement-making materials. Properties of building stones. Rock-flours and their uses. Origin and uses of road metals. Studies of ornamental stones. Coal and coal basins. Hydrographic studies. *Either or both semesters; arrange time; (2, 3 or 5)*. Professor ROLFE, Mr. Fox, Mr. JONES.

Required: Geology 1, 3, 12 or 13.

3. GENERAL GEOLOGY, MINOR COURSE.—This course is an abridgment of courses 5, 1, 2, and 8. One hour each day is devoted to laboratory work, and this time is about equally divided between the study of minerals, rocks, and fossils.

The instruction is by text and lectures, using *Scott's Introduction to Geology* as the basis for the class-room work and a specially

prepared guide for the laboratory. *I. and II.; M., W., F.; 6 and 7; (3).* Professor ROLFE, Mr. Fox, Mr. JONES.

4. INVESTIGATION.—Students desiring to take advanced work in any department of dynamic or historical geology, in mineralogy, or in physical geography, may, with the approval of the head of the department, select a subject for investigation, and will receive such guidance and help as may be necessary. *Either semester; arrange time; (3 or 5).* Professor ROLFE, Mr. Fox, Mr. JONES.

Required: Such preliminary work as will enable the student to carry forward his investigation successfully.

5. ELEMENTS OF MINERALOGY, CRYSTALLOGRAPHY AND PETROGRAPHY OF CRYSTALLINE ROCKS.

a. Mineralogy and Crystallography. In the lectures such subjects as follows are discussed: Genesis of minerals; conditions favoring their deposition; origin of the massive and crystalline forms; relationships of minerals and their classification; the physical properties of minerals, with the conditions which may cause them to vary; the elements of crystallography, including a study of the typical whole, half, and quarter forms of each system, and their identification when in combination. In the laboratory the student is made acquainted with the simplest trustworthy methods for proving the presence or absence of the acids and bases. He is then required to determine a large number of species by their physical and chemical properties only; to trace the origin, transformation, and relationship of each; and explain any variations from the typical form, composition, or physical characters which may occur.

b. Petrography. The classification of rocks, the methods used in their determination, the conditions governing the formation of each species, the decomposition to which they are liable and the products of these decompositions. *I.; 1, 2; (for chemists 3 to 5).* Mr. Fox.

Required: Chemistry I.

6. ADVANCED CRYSTALLOGRAPHY.—During the first part of the semester a detailed study of the forms of crystals, their combinations and abnormalities is made. Later the student learns to measure the facial angles of crystals with the contact or reflecting goniometer, and by mathematical calculations to determine its species. *I.; Tu., Th.; 3, 4; (2)* Professor ROLFE and Mr. Fox.

Required: Geology 5 or 10.

7. OPTICAL MINERALOGY.—The student is first made acquainted with the peculiarities of the petrographic microscope. He then places thin sections of minerals and rocks under the microscope and learns to determine their species and the changes which are taking place in them by their effect on transmitted light. *I.; M., W., F.; 3, 4, (3).* Professor ROLFE and Mr. FOX.

Required: Geology 5 or 10.

8. See under Physical Geography.

9. ADVANCED PALEONTOLOGY.—The work outlined under geology 1d (p. 246) can do little more than introduce the general subject. To those who desire a better acquaintance with paleontology a course of one or two semesters is offered.

This course includes: (a) Discussion of the biological relations of fossil forms along the lines indicated in Williams' Geological Biology; (b) a discussion of the principles of classification as applied to fossils, together with the characteristics which distinguish the larger groups, using Nicholson, Bernard, and Zittel as guides; (c) a study of the distribution and variations of the genera and species of one or more of the important groups as illustrated by the collections of the University, using the various state reports and Miller's Handbook as aids. *I., II.; 3, 4; (5) either semester.* Professor ROLFE, Mr. FOX, Mr. JONES.

Required: . Geology 1 or 3; a major in botany or zoology.

10. See under Physical Geography.

12. AGRICULTURAL GEOLOGY.—A strictly technical course designed to meet the wants of the agriculturist. *II.; 3, 4; (5).* Professor ROLFE and Mr. JONES. Open to agricultural students only.

13. ENGINEERING GEOLOGY.—This is a strictly technical course dealing with those points which are especially useful to engineers. *II.; 3, 4; (5).* Mr. FOX and Mr. JONES. Open to engineers only.

14. METEOROLOGY.—This course is the same as the first half of 8, and is taken in the same class. It is offered especially to students in agriculture. *I.; M., W., F.; 6 and 7; (3).* Professor ROLFE and Mr. JONES.

COURSES FOR GRADUATES

Courses 2, 4, 6, 7 and 9 may also be taken by graduates. The following are for graduates only:

102. ECONOMIC GEOLOGY.—The laboratories afford facilities for

the study of problems in economic geology by the most approved methods. These problems may be approached from the geological side only in the laboratories of that department, or may be carried on under the joint direction of the departments of geology and applied chemistry.

Again, they may be purely laboratory problems; or the student may make an economic survey of some assigned area.

104. DYNAMIC GEOLOGY.—Problems in glacial geology; deserted lake basins; preglacial drainage; the Ozark ridge; water supply; origin of peculiar soils, etc.

108. PHYSICAL GEOGRAPHY.—Studies in Illinois geography, dealing with the topography, meteorology, climatology and natural products of assigned areas.

GERMAN

Assistant Professor MEYER, Assistant Professor BROOKS, Miss BLAISDELL, Dr. DAVIS, Mr. HAUHART, Dr. KULLMER

1. ELEMENTARY COURSE.—*Vos's Essentials of German, Huss's German Reader. I.; section A, 1; section B, 1; section C, 2; section D, 2; section E, 3; section F, 4; section G, 4; section H, 6; section I, 6; section J, 7; (4).* Assistant Professor MEYER, Assistant Professor BROOKS, Miss BLAISDELL, Dr. DAVIS, Mr. HAUHART, Dr. KULLMER.

3. NARRATIVE AND DESCRIPTIVE PROSE.—Grammar and syntax, reading of easy texts, exercises in prose composition. *II.; section A, 1; section B, 1; section C, 2; section D, 2; section E, 3; section F, 4; section G, 4; section H, 6; section I, 6; section I, 7; (4);* Assistant Professor MEYER, Assistant Professor BROOKS, Miss BLAISDELL, Dr. DAVIS, Mr. HAUHART, Dr. KULLMER.

Required: German 1, or one year of high school German.

4. DESCRIPTIVE AND HISTORICAL PROSE.—Selections from standard prose writers. Light reading. Prose composition. *I.; section A, 1; section B, 2; section C, 2; section D, 3; section E, 4; section F, 6; section G, 8; (4).* Assistant Professor MEYER, Assistant Professor BROOKS, Miss BLAISDELL, Dr. DAVIS, Mr. HAUHART, Dr. KULLMER.

Required: German 1 and 3, or two years of high school German.

5. INTRODUCTION TO CLASSICS.—Two of Schiller's dramas and

Lessing's *Minna von Barnhelm*, or Goethe's *Egmont*, or Hermann and Dorothea. Prose composition. *II.*; *section A*, 1; *section B*, 2; *section C*, 3; *section D*, 4; *section E*, 8; (4). Assistant Professor MEYER, Assistant Professor BROOKS, Miss BLAISDELL, Mr. HAUHART, Dr. KULLMER.

Required: German 4.

6. SCIENTIFIC PROSE.—Practice in the rapid reading of works of a general scientific character. *II.*; *section A*, 2; *section B*, 6; (4). Dr. DAVIS.

Required: German 4.

7. HEINE'S PROSE; GERMAN LYRICS.—Rapid translation and sight reading of selections from Heine's prose works; study of lyric verse, using as a guide *Hatfield's German Lyrics and Ballads*. *I.*; *M.*, *W.*, *F.*; 7; (3). Assistant Professor MEYER.

Required: German 5 or 6, or three years of high school German.

8. SCHILLER.—The life of Schiller and study of *Wallenstein* and other selections. *I.*; *Tu.*, *Th.*; 3; (2). Assistant Professor BROOKS.

Required: German 10 or 24.

9. GOETHE'S FAUST.—Part I. and portion of Part II. *I.*; *M.*, *W.*, *F.*; 3; (3). Assistant Professor MEYER.

Required: German 10.

10. GOETHE.—The life of Goethe and study of selections from his lyrics, dramas, and prose works. *II.*; *M.*, *W.*, *F.*; 7; (3). Assistant Professor MEYER.

Required: German 7 or 12 or 23.

11. HISTORY OF MODERN GERMAN LITERATURE.—Lectures, recitations, and reports on assigned collateral reading. *II.*; *Tu.*, *Th.*; 7; (2). Assistant Professor BROOKS.

Required: German 7 or 12 or 23.

12. RECENT AND CONTEMPORARY PROSE FICTION.—Rapid reading of works by Freytag, Dahn, Heyse, Sudermann, and others. *I.*; *Tu.*, *Th.*; 7; (2). Assistant Professor BROOKS.

Required: German 5 or 6, or three years of high school German.

16. ADVANCED PROSE COMPOSITION.—Translation of ordinary prose into German, study of idiomatic constructions, and practice in rendering at sight. The work is conducted, as far as practicable,

in German, and is given with special reference to the needs of students who intend to teach German. *II.*; *M.*, *W.*, *F.*; 8; (3). Miss BLAISDELL.

Required: German 8 or 9 or 10 or 24.

19. HISTORICAL AND ECONOMIC READING.—Selections from standard writers in the field on history and economics. Primarily for students in business courses, but open to others. *I.*; *M.*, *W.*, *F.*; 8; (3). Dr. DAVIS.

Required: German 5 or 6, or three years of high school German.

20. COMMERCIAL READING AND COMPOSITION.—Practice in reading and in writing commercial German, with the use of *Whitfield and Kaiser's Commercial German*. *II.*; *M.*, *W.*, *F.*; 8; (3). Dr. DAVIS.

Required: German 19.

23. THE ROMANTIC SCHOOL.—Rapid translation and sight reading; reports on assigned reading. The course is offered as an alternative of course 7, though students may elect both. *I.*; *M.*, *W.*, *F.*; 4; (3). Miss BLAISDELL.

Required: German 5 or 6, or three years of high school German.

24. RECENT AND CONTEMPORARY DRAMA.—Study of dramas by Heyse, Hauptmann, Sudermann, Fulda, and others. This course is offered as an alternative of course 10, though students may elect both. *II.*; *M.*, *W.*, *F.*; 4; (3). Assistant Professor BROOKS.

Required: German 7 or 12 or 23.

25. TEACHERS' COURSE.—Lectures, discussion of methods, examination of text-books. Open to seniors and special students who have not less than 20 hours' credit in German. It should be accompanied or preceded by education I or its equivalent. *II.*; *F.*; 7; (1). Assistant Professor MEYER.

26. GERMAN LITERATURE BEFORE THE REFORMATION.—Lectures, recitations, and reports on assigned reading. The course is intended to cover the period not included in course 11, and students who intend to take course 11 are advised to elect course 26. *I.*; *Tu.*; 8; (1). Assistant Professor BROOKS.

27. LESSING.—The life of Lessing and study of *Nathan der Weise*, *Emilia Galotti*, and other selections. *II.*; *M.*, *W.*, *F.*; 3; (3). Assistant Professor MEYER.

Required: German 8 or 9 or 10.

For courses in the Drama and Science of Language see Comparative Literature and Philology.

COURSES FOR GRADUATES

101. INTRODUCTION TO MIDDLE HIGH GERMAN.—Open to seniors who have had German 10 or 24. *I.; M., W., F.; 8; (3).* Assistant Professor BROOKS.

102. OLD HIGH GERMAN AND ELEMENTS OF HISTORICAL GRAMMAR.—Reading of Old High German texts and historical study of German grammar. *II.; Tu., Th.; 8; (2).* Assistant Professor BROOKS.

Required: German 101.

103. SEMINARY IN MODERN GERMAN LITERATURE.—Open to seniors who are specializing in German. Some literary movement or group of authors is studied and the reports presented may be revised and offered as thesis. *I. or II.; Tu., Th.; 8; (2) or (4).* Assistant Professor MEYER.

GREEK

Professor Moss, Dr. NEVILLE

Courses 1 to 4, inclusive, are designed to meet the needs of students who cannot present Greek for entrance, and yet wish to study the language. The announcement of authors is tentative, and may be changed as the progress of the classes requires.

1. GRAMMAR AND READER.—*I.; M., Tu., W., Th.; 4; (4).* Dr. NEVILLE.

2. GRAMMAR AND READER.—*II.; M., Tu., W., Th.; 4; (4).* Dr. NEVILLE.

Required: Greek 1.

3. XENOPHON'S ANABASIS, with selections from the narrative parts of Thucydides. *I.; Tu., W., Th., F.; 3; (4).* Professor Moss.

Required: Greek 2.

4. HOMER.—ODYSSEY.—Selections. *II.; Tu., W., Th., F.; 3; (4).* Professor Moss.

Required: Greek 3.

5. HERODOTUS.—Greek prose composition. *I.; M., Tu., W., Th.; 6; (4).* Professor Moss.

Required: Entrance credits.

6. ANDOCIDES AND LYSIAS.—Greek prose composition. *II.*; *M., Tu., W., Th.*; 6; (4). Professor Moss.

Required: Greek 5.

7. XENOPHON.—*Memorabilia*. *I.*; *M., W., Th., F.*; 2; (4). Dr. NEVILLE.

Required: Greek 6.

8. PLATO.—One or more complete dialogs, and selections. *II.*; *M., W., Th., F.*; 1; (4). Professor Moss.

Required: Greek 7.

9. GREEK ORATORY.—*I.*; *M., W., F.*; 2; (3). Professor Moss.

Required: Greek 8.

10. GREEK TRAGEDY.—*I.*; *Tu., Th.*; 2; (2). Professor Moss.

Required: Greek 8.

11. HOMER.—*The Iliad*. *II.*; *M., W., F.*; 4; (3). Professor Moss.

Required: Greek 8.

12. THUCYDIDES.—*II.*; *Tu., Th.*; 4; (2). Professor Moss.

13. NEW TESTAMENT GREEK.—*II.*; *Tu., Th.*; 2; (2). Professor Moss.

Required: Greek 4.

14. GREEK POETRY.—Lectures and prescribed readings from English translations. *I.*; *Tu., Th.*; 4; (2). Professor Moss.

15. GREEK PROSE.—Lectures and prescribed readings from English translations. *II.*; *Tu., Th.*; 1; (2). Professor Moss.

16. THE PRIVATE AND PUBLIC LIFE OF THE GREEK PEOPLE.—Lectures and prescribed readings. A large collection of photographs and lantern slides is used to illustrate this course. *II.*; *M.*; 3; (1). Professor Moss.

Courses 14, 15 and 16 are open to any student of the university above freshman year.

See also courses in Comparative Literature and Philology.

COURSES FOR GRADUATES

101. GREEK ORATORY.—Professor Moss.

17. ADVANCED GREEK PROSE COMPOSITION.—*I.*; *arrange time*; (1). Professor Moss.

Required: Greek 6.

HISTORY

Professor GREENE, Assistant Professor SCHOOLCRAFT, Mr. ALVORD.

Introductory Courses

I. THE MEDIEVAL AND MODERN HISTORY OF EUROPE. — This course will furnish the best general introduction to the advanced courses of the department. The work of either semester may be taken separately. *I., II.; section A, 1; section B, 2; section C, 7; (4).* Professor GREENE, Assistant Professor SCHOOLCRAFT, Mr. ALVORD.

II. THE POLITICAL HISTORY OF ENGLAND.—For students who also take History I, this course counts for three hours only. *II.; daily; 7; (5).* Assistant Professor SCHOOLCRAFT.

3. THE HISTORY OF THE UNITED STATES.—This course begins with a brief review of colonial conditions in 1750, and is intended to give a general view of national development to the close of the Reconstruction period. It is open to all students who have had one year of college work. *I.; daily; 1; (5).* Professor GREENE.

Advanced Courses

4. ENGLISH CONSTITUTIONAL HISTORY.—In this study of the growth of the English constitution, some attention is also given to the development of legal institutions. The course is therefore adapted to the needs of students who expect to follow the profession of law. *I., II.; M., W., F.; 3; (3).* Assistant Professor SCHOOLCRAFT.

Required: History I or II.

5. THE HISTORY OF GREECE.—*I., II.; M., W., F.; 3; (3).* Mr. ALVORD.

Required: One year of college work.

6. THE HISTORY OF ROME.—*I., II.; M., W., F.; 3; (3).* Mr. ALVORD. [Not given in 1905-1906. Courses 5 and 6 will be given in alternate years.]

7. THE REVOLUTIONARY ERA IN EUROPE, 1763-1815.—*I.; M., W., F.; 2; (3).* Assistant Professor SCHOOLCRAFT. [Not given in 1905-1906.]

Required: History I, or its equivalent.

9. THE PERIOD OF THE ITALIAN RENAISSANCE.—*II.; M., W., F.; 7; (3).* Mr. ALVORD.

Required: History I.

10. THE DEVELOPMENT OF THE BRITISH COLONIAL EMPIRE.—*I.; M., W., F.; 2; (3).* Assistant Professor SCHOOLCRAFT.

Required: History I or II.

2. THE POLITICAL HISTORY OF EUROPE IN THE NINETEENTH CENTURY.—*I.; M., W., F.; 4; (3).* Professor GREENE.

Required: History I.

12. THE HISTORY OF GERMANY, 1648-1871.—Special attention is given to the rise of Prussia and the establishment of the new German empire. *II.; M., W., F.; 2; (3).* Assistant Professor SCHOOLCRAFT.

Required: One year of college work in German or history.

13. THE CONSTITUTIONAL AND POLITICAL HISTORY OF THE ENGLISH COLONIES OF NORTH AMERICA, 1606-1776.—*II.; M., W., F.; 1; (3).* Professor GREENE.

Required: History II or 3.

14. THE CONSTITUTIONAL HISTORY OF THE UNITED STATES, 1775-1860.—*I.; M., W., F.; 7; (5).* Professor GREENE.

Required: History 3.

15. THE CONSTITUTIONAL AND POLITICAL HISTORY OF THE UNITED STATES SINCE 1860.—Special attention will be given to the periods of civil war and reconstruction. *II.; M., W., F.; 4; (3).* Professor GREENE.

Required: History 3. [Open only to juniors, seniors and graduates.]

16. THE HOLY ROMAN EMPIRE UNDER THE HOHENSTAUFEN.—The conflict of Church and State. *I.; Tu., Th.; 7; (2).* Mr. ALVORD.

Required: History I.

17. THE HISTORY OF ILLINOIS.—The subject is treated not from a purely local point of view, but as illustrating the development of a typical American Commonwealth. *II.; Tu., and at the option of the instructor, Th.; 4; (2).* Professor GREENE.

COURSES FOR GRADUATES

(Open also to seniors writing theses.)

101. SEMINARY IN AMERICAN HISTORY.—*I., II; arrange time; (2 or more at the option of the students and the instructor).* Professor GREENE.

102. SEMINARY IN ENGLISH HISTORY.—This course is adapted to students who wish to write theses in English history. *I., II.; arrange time; (2 or more at the option of the students and the instructor.)* Assistant Professor SCHOOLCRAFT.

Attention is also called to the courses in economic history offered by the department of economics.

HORTICULTURE

Professor BLAIR, Professor BURRILL, Assistant Professor LLOYD,
Assistant Professor CRANDALL, Mr. BEAL, Mr. WYMAN

1. PRINCIPLES OF FRUIT GROWING.—An introductory course dealing with the fundamental principles of fruit culture. It embraces a study of location with reference to climate and markets, planting, soil treatment, pruning, protection from insects and diseases, harvesting and marketing. It is advised that Botany I or II be taken before or contemporaneously with this course. Recitations, reference readings, and practical exercises. *I.*; *section A, M., W., F.*; 3; *section B, M., W., F.*; 6; *laboratory, section A, Tu., Th.*; 3, 4; *section B, 6, 7*; (5). Assistant Professor LLOYD.

2. SMALL FRUIT CULTURE.—A study of the strawberry, raspberry, blackberry, dewberry, currant, gooseberry, cranberry, and juneberry. Each fruit is studied with reference to history, importance and extent of cultivation, soil, location, fertilizers, propagation, planting, tillage, pruning, insect enemies, diseases, varieties, harvesting, marketing, profits. Recitations and reference readings, with occasional practical exercises. *II.*; *Tu., Th.*; 1; (2). Assistant Professor LLOYD.

3. VEGETABLE GARDENING.—An introductory course, including a study of the general principles of vegetable gardening and a brief consideration of the cultural requirements of each of the common vegetables. Special attention is given to the home garden. *II.*; *M., W., F.*; 1; (3). Assistant Professor LLOYD.

4. PLANT HOUSES.—The construction and management of plant houses, with especial reference to the growing of vegetables under glass. Text-book and laboratory work. *I.*; *Recitations, Tu., Th.*; 1; *Laboratory, M., W., F.*; 1, 2; (5). Mr. BEAL.

5. PLANT PROPAGATION.—Grafting, budding, layering, making cuttings, pollination, seedage, etc. Text-book and laboratory work. *I.*; *second half; Recitations; section A, M., W.*; 3; *section B, Tu., Th.*; 7; *Laboratory; section A, Tu., Th., S.*; 3, 4; *section B, M., W., F.*; 6, 7; (2½). Mr. BEAL.

6. NURSERY METHODS.—A study of some details of nursery management and their relation to horticulture in general. Lectures

and reference readings. *II.*; *first half*; *daily*; 8; ($2\frac{1}{2}$). Assistant Professor CRANDALL.

Required: Horticulture 1, 5; Entomology 4.

7. SPRAYING.—The theory and practice of spraying plants, embracing a study of materials and methods employed in the combating of insects and fungous diseases. Recitations, reference readings, and laboratory work. *II.*; *second half*; *Recitations*, Tu., Th.; 6; *Laboratory*, M., W., F.; 6, 7; ($2\frac{1}{2}$). Assistant Professor LLOYD.

Required: Horticulture 1, Entomology 4, Chemistry 1.

8. ORCHARDING.—A comprehensive study of pomaceous fruits (apple, pear, quince), and drupaceous or stone fruits (plum, cherry, peach, nectarine, apricot). Each fruit studied with reference to the points enumerated under 2, above. Lectures, text-books, and laboratory work. *II.*; *Recitations*, M., W., F.; 3; *Laboratory*, Tu., Th.; 3, 4; (5). Professor BLAIR.

Required: Horticulture 1; Botany I or II.

9. FORESTRY.—This course embraces a study of forest trees and their natural uses, their distribution, and their artificial production. The relations of forest and climate are studied, and the general topics of forestry legislation and economy are discussed. *II.*; Tu., Th.; 4; (2). Professor BURRILL.

Required: Botany I or II.

10. LANDSCAPE GARDENING.—Ornamental and landscape gardening, with special reference to the beautifying of home surroundings. Lectures illustrated by means of lantern slides and charts, recitations, reference reading, and practical exercises. *II.*; M., W., F.; 4; (3). Professor BLAIR.

Required: Two years of University work, or special preparation.

11. ECONOMIC BOTANY.—Useful plants and plant products. Lectures and assigned readings. *I.*; Tu., Th.; 1, 2; (2) Professor BURRILL.

Required: Botany I or II.

12. EVOLUTION OF HORTICULTURAL PLANTS.—Comprising a study of organic evolution and the modification of plants by domestication. *I.*; *second half*; *daily*; 3; ($2\frac{1}{2}$). Assistant Professor CRANDALL.

Required: Two years of University work.

13. VITICULTURE.—A comprehensive study of the grape and its products. *I.*; *second half*; *daily*; 5; ($2\frac{1}{2}$). Assistant Professor CRANDALL.

Required: Horticulture 1, 5.

14. NUT CULTURE.—The cultivation and management of nut-bearing trees for commercial purposes. *II.; first half; daily; 6; (2½)*. Assistant Professor CRANDALL.

Required: Horticulture 1, 5.

15. COMMERCIAL FLORICULTURE.—A study of the growing of cut flowers and decorative plants. Recitations and practical exercises in the greenhouse. *II.; daily; 3; (5)*. Mr. BEAL.

Required: Horticulture 4, 5. Botany 2.

16. GENERAL HORTICULTURE.—For students not registered in the College of Agriculture. A course covering the general principles and processes of fruit-growing, gardening, floriculture, and ornamental planting. *I.; daily; 2; (5)*. Professor BLAIR, Assistant Professor LLOYD, and Mr. BEAL.

17. COMMERCIAL HORTICULTURE.—A course giving practical training for those students intending to follow horticulture as a business. Work in houses, orchards, and gardens,—suited to ability and requirements of each student. Special permission required for admission into this course. *I., II., arrange hours; (5-20)*. Assistant Professor LLOYD, Assistant Professor CRANDALL, Mr. BEAL.

18. EXPERIMENTAL HORTICULTURE.—A course for those intending to engage in professional horticulture or experiment station work. For advanced students. *I.; daily; 1; (5)*. Professor BLAIR, Assistant Professor LLOYD, Assistant Professor CRANDALL.

Required: Twenty hours work in horticulture.

19. AMATEUR FLORICULTURE.—A study of window gardening and the growing of flowers on the home grounds, including the culture of roses and flowering shrubs. Recitations and practical exercises. *I., II.; Th., Sat.; 2; (2)*. Mr. BEAL.

Required: Botany I or II.

20. MARKET GARDENING.—The application of the principles of vegetable gardening to operations on a commercial scale. Special attention is given to the preparation of vegetables for market. Lectures, reference readings and practical exercises. *II.; second half and summer vacation; arrange time; (2½-5)*. Assistant Professor LLOYD.

Required: Horticulture 3.

21. SPECIAL VEGETABLE CROPS.—In this course the work of each student is largely individual, being an exhaustive study of some vegetable or group of vegetables from a horticultural standpoint.

Reference readings and field experiments. *II.; second half and summer vacation; arrange time, (2½-5).* Assistant Professor LLOYD.

Required: Horticulture 3.

22. SPECIAL INVESTIGATION AND THESIS WORK.—Required of candidates for graduation. *I., II.; arrange time; (5-10).* Professor BLAIR, Professor BURRILL, Assistant Professor LLOYD, Assistant Professor CRANDALL.

COURSES FOR GRADUATES

101. POMOLOGY.—Studies of special problems regarding the relationships, adaptations, improvement, propagation, cultivation, pruning, protection, preservation or marketing of orchard fruits. *Arrange time.* Professor BLAIR and Assistant Professor CRANDALL.

102. POMOLOGY.—Studies of special problems regarding the adaptations, propagation, cultivation or pruning of small fruits. *Arrange time.* Assistant Professor CRANDALL.

103. OLERICULTURE.—Studies of special problems regarding the structure, cultural requirements, seed selection and improvement of vegetables. *Arrange time.* Assistant Professor LLOYD.

104. FLORICULTURE.—Studies of the horticultural status of various flowering plants, or of special problems in the culture of greenhouse plants. *Arrange time.* Mr. BEAL.

105. LANDSCAPE HORTICULTURE.—Exhaustive studies of ornamental plants, and methods of grouping the same for the effective planting of public and private grounds. *Arrange time.* Professor BLAIR, and Mr. WYMAN.

106. FORESTRY.—Problems in general forestry and investigations of forest growths. *Arrange time.* Professor BURRILL.

HOUSEHOLD SCIENCE

Professor BEVIER, Mrs. SOBER, and Miss USHER

I. PRINCIPLES OF THE SELECTION AND PREPARATION OF FOOD.—The nature and uses of food, its chemical composition, and the changes effected by heat, cold or fermentation. Practical illustrations of the principles of selection are given by marketing expeditions. Some of the processes of the manufacture of food are considered, as well as the combinations of different kinds. *II.; section A, M., W.; 1, 2; Quiz, F., 1; section B, M., W.; 3, 4; Quiz, F., 3; section C, M., W.; 7, 8; Quiz, F., 7; section D, Tu., Th.; 1, 2; Quiz,*

F., 1; *section E*, *Tu.*, *Th.*; 3, 4; *Quiz*, *F.*, 3; *Lecture*, *Tu.*; 6; (3).
Mrs. SOBER.

Required: Entrance credit in Physics; Chemistry 1

2. HOME ARCHITECTURE AND SANITATION.—The situation, surroundings, and construction of the house; the hygiene of the home; heating, lighting, ventilation, water supply, and drainage. Lectures on house planning, with exercise in making skeleton plans, and on sanitary plumbing and fixtures and internal drainage.¹ *I.*; *Tu.*, *Th.*; 2; (2). Professor BEVIER.

3. ELEMENTARY HOME DECORATION.—A continuation of course 2. Lectures² on the evolution of the house and the homes of primitive peoples, the theory of color and its application in home decoration. The evolution of the home, furnishings from a sanitary and artistic standpoint. *II.*; *Tu.*, *Th.*; 2; (2). Professor BEVIER.

Required: Art and Design 1 and 16 and Household Science 2.

4. FOOD AND NUTRITION.—An application of the principles of pure science to the problems of food and nutrition. The problems may be physiological, chemical or bacteriological. Each student investigates some particular problem. *Novy's Physiological Chemistry. Government Bulletins. I.*; *Laboratory M., W., F.*; 3, 4; *Lecture*, *Tu.*; 3; *Quiz*, *Th.*; 3; (5). Professor BEVIER and Miss USHER.

Required: Botany 5; Chemistry 1, 3b, 4, 5c, 5a or 13a; 5 hours in Botany or Zoology; Household Science 1, 6, 5.

5. DIETETICS AND PRINCIPLES OF CLEANING.—The work in dietetics includes the following topics. The principles of diet; the relation of food to health; influence of age, sex and occupation on diet; the construction of dietaries; dietetic treatment of certain diseases; principles of home nursing. The work in cleaning includes a study of the principles and processes involved in the proper care and the cleansing of metals, woods, and fabrics; the use of disinfectants. Laboratory practice is given in both parts of the course. *II.*; *M., W., F.*; 4; (3). Miss USHER.

Required: Household Science 1, 6; Physiology 4.

6. ECONOMIC USES OF FOOD.—This course is a continuation of course 1. Emphasis is put upon the economic side of the food question. The uses and applications of preservatives are considered. *II.*; *section A*, *M., W.*; 1, 2; *section B*, *M., W.*; 7, 8; *section C*, *Tu., Th.*; 3, 4; *Quiz*, *F.*, 1, 8; (3). Mrs. SOBER.

Required: Household Science 1.

¹By Professors White. ²By Professors Ricker and Wells.

7. TEXTILES.—The development of primitive industries, production of fibres used in textile manufactures; properties of fibres, preparation, adulteration, manufacture. *I.; Tu., Th.; 7; (2).* Mrs. SOBER.

8. HYGIENE AND PUBLIC HEALTH.—In this course such phases of the subject are considered as have a direct practical bearing upon individual and public health. *II.; Tu.; 8; (1).* Professor BEVIER.

9. SEMINARY.—This course aims to make the student intelligent concerning the various phases of Home Economics. It includes a study of the work in different types of institutions, the planning of courses for these types and some practice in presenting the work. For advanced students. *I., II.; W.; arrange time; (1).* Professor BEVIER.

10. HOUSEHOLD MANAGEMENT.—This course deals with the organization of the household; the care of the house and family; expenditure of income and other essentials of a well ordered home. *I.; Tu., Th.; 6; (2).* Miss USHER.

Open to juniors and seniors.

Required: Household Science 1, 6, 5.

COURSES FOR GRADUATES

101. HOME ECONOMICS.—A study of the origin and development of Home Economics, with particular reference to its industrial, educational, and sociological aspects. *Arrange time.* Professor BEVIER.

102. SPECIAL INVESTIGATION.—Problems in the application of the principles of bacteriology, chemistry, and physiology, to the ordinary processes used in the preparation of food. *Arrange time.* Professor BEVIER.

ITALIAN

Dr. JONES

1. GRAMMAR AND READING.—Italian grammar with composition. Reading of modern Italian. Toward the end of the year the class will begin the study of Dante. Outlines of Italian literature. *I., II.; M., W., F.; 3; (3).* Dr. JONES.

LATIN

Professor BARTON, Dr. NEVILLE

1. CICERO AND PLINY.—Tusculan Disputations, books I. and II.; composition based on the text; selections from Pliny's letters; Roman life in Pliny's time. Students offering nine credits in Latin will take this course. *I., II.; M., Tu., W., Th.; 1; (4)* Dr. NEVILLE.

2. LIVY.—Selections from the XXI. and XXII. books, and sight reading from book I. Students offering twelve credits in Latin for admission will take this course. *I.; M., Tu., W., F.; 2; (4)*. Professor BARTON.

3. TERENCE.—Phormio, Roman Comedy; Roman Life in Prose and Verse; outlines of Roman literature. *II.; M., Tu., W., F.; 2; (4)*. Professor BARTON.

4. HORACE AND CATULLUS.—The Odes of Horace and the lyrics of Catullus. *I.; Tu., W., Th., F.; 7; (4)*. Dr. NEVILLE.

Required: Latin 2, 3.

5. LATIN COMPOSITION.—This is an elementary course and will combine grammatical drill with practice in the simpler forms of expression. The work will be based on Livy. *I.; Tu., Th.; 2; (2)*. Dr. NEVILLE.

6. PLAUTUS.—Five plays, one for careful study, the others for more rapid reading. Scenic antiquities. *II.; Tu., W., Th., F.; 7; (4)*. Professor BARTON.

Required: Latin 2, 3.

7. PROSE OF THE EARLY AND LATE EMPIRE.—Selections from Petronius Pliny the Elder, Suetonius, Apuleius, and Minucius Felix. The Roman novel. *II.; Tu., Th.; 8; (2)*. Dr. NEVILLE.

Required: Latin 1 or 2, and 3, 4, 6.

8. ROMAN SATIRE AND EPIGRAM.—Selections from Juvenal and Martial. *II.; M., W., F.; 3; (3)*. Dr. NEVILLE.

Required: Latin 1 or 2, and 3, 4, 6. [Not given in 1905-1906.]

9. TEACHERS' COURSE.—The purposes and methods of preparatory Latin instruction. Three years' work in Latin is requisite for this course. In exceptional cases this requirement may be waived. *II.; M., W., F.; 3; (3)*. Professor BARTON.

10. LATIN COMPOSITION.—A careful study of the idioms and leading principles of Latin composition with occasional imitations of assigned models. *I.; M., W., F.; 3; (3)*. Professor BARTON.

Required: Latin 1, or 2, and 3, 5.

11. THE ELEGIAC POETS.—Tibullus, Propertius, and Ovid. *I.*; *M.*, *W.*, *F.*; 3; (3). Dr. NEVILLE.

Required: Latin 1 or 2, and 3, 4, 6. [Not given in 1905-1906.]

12. LATIN LITERATURE IN ENGLISH.—A study of masterpieces of Latin literature in English translations. Open to all students of the University except freshmen. *II.*; *M.*; 8; (1). Professor BARTON.

13. PRIVATE LIFE OF THE ROMANS.—Text, illustrated lectures, and assigned readings. *II.*; *F.*; 8; (1). Professor BARTON.

Open to all students of the University except Freshmen.

14. SENECA.—Two or three plays; Roman tragedy; selections from his essays and epistles. *I.*; *M.*, *W.*, *F.*; 7; (3). Professor BARTON.

Required: Latin 1 or 2, and 3, 5, 6.

15. POETRY OF THE EARLY AND LATE EMPIRE.—Selections from Lucanus, Calpurnius, Valericus, Flaccus, Ausonius and Claudianus. *I.*; *W.*, *Th.*, *F.*; 8; (2). Professor BARTON.

Required: Latin 1 or 2, and 3, 4, 6.

LAW

Professors HARKER, PICKETT, HUGHES, CLARK, GREEN, Assistant Professor NORTHRUP

1. CONTRACTS.—Text-book, *Williston's Cases on Contracts*. *I.*, *II.*; (3). Professor PICKETT.

2. TORTS.—Text-book, *Ames and Smith's Cases on Torts*. *I.*, *II.*; (2). Professor CLARK.

3. REAL PROPERTY.—Text-book, *Gray's Cases on Property*. *I.*, *II.*; (2). Assistant Professor NORTHRUP.

4. COMMON LAW PLEADING.—Text-book, *Perry on Common Law Pleading*. *I.*; (2). Professor HARKER.

5. CRIMINAL LAW.—Text-book, *Beale's Cases on Criminal Law*. *II.*; (3). Professor HUGHES.

6. PERSONAL PROPERTY.—Text-book, *Gray's Cases on Property*. *I.*; (1). Assistant Professor NORTHRUP.

7. DOMESTIC RELATIONS.—Text-book, *Smith's Cases on Law of PERSONS*. *II.*; (2). Professor GREEN.

8. EVIDENCE.—Text-book, *Thayer's Cases on Evidence*. *I.*; (4). Professor HUGHES.

9. SALES.—Text-book, *Williston's Cases on Sales*. *II.*; (3). Assistant Professor NORTHRUP.

- 10a. REAL PROPERTY.—Text-book, *Gray's Cases on Property*. I.; (2). Assistant Professor NORTHRUP.
- 10b. REAL PROPERTY.—Text-book, *Gray's Cases on Property*. II.; (2). Assistant Professor NORTHRUP.
11. AGENCY.—Text-book, *Wambaugh's cases on Agency*. II.; (3). Professor GREEN.
12. EQUITY.—Text-book, *Ames' Cases on Equity*. I., II.; (3). Professor PICKETT.
13. DAMAGES.—Text-book, *Beale's Cases on Damages*. I.; (2). Assistant Professor NORTHRUP.
14. BAILMENTS AND CARRIERS.—Text-book, *McClain's Cases on Carriers*. I.; (2). Professor GREEN.
15. BILLS AND NOTES.—Text-book, *Ames' Cases on Bills and Notes*. I., II.; (2). Professor PICKETT.
16. TRUSTS.—Text-book, *Ames' Cases on Trusts*. I.; (3). Professor CLARK.
17. PRIVATE CORPORATIONS.—Text-book, *Smith's Cases on Private Corporations*. I.; (3). Professor HUGHES.
18. WILLS AND ADMINISTRATION.—Text-book, *Gray's Cases on Property, Vol. IV.* I.; (2). Assistant Professor NORTHRUP.
19. PARTNERSHIP.—Text-book, *Ames' Cases on Partnership*. II.; (2). Professor HUGHES.
20. EQUITY PLEADING.—Text-book, *Shipman on Equity Pleading*. II., (2). Professor HARKER.
21. SURETYSHIP.—Text-book, *Ames' Cases on Suretyship*. II.; (3). Professor CLARK.
- 21a. MORTGAGES.—Text-book, *Black on Mortgages*. II.; (1). Professor HARKER.
22. CONSTITUTIONAL LAW.—Text-book, *McClain's Cases on Constitutional Law*. I., II.; (2). Professor GREEN.
24. MUNICIPAL CORPORATIONS.—Text-book, *Smith's Cases on Municipal Corporations*. II.; (1). Professor HUGHES.
26. MOOT COURT.—I., II.; (1). Professor HARKER.

LIBRARY SCIENCE

Professor SHARP, Assistant Professors SIMPSON and BECK, Miss JACKSON, Miss HOWE, and Miss ROYCE

I. ELEMENTARY LIBRARY ECONOMY.—Instruction follows the regular library routine. The work of the order department is taught by lectures and practice. American, English, French, and

German trade bibliography is introduced. Instruction in the accession department is according to Dewey's Library School Rules. Lectures are given upon duplicates, exchanges, gifts, importing, copyright, and allied topics. The Dewey decimal classification is taught by classifying books. In the shelf department Dewey's Library School Rules is used and supplemented with lectures. Sample shelf-lists are made with both sheets and cards. Cataloging is taught according to Dewey's Library School Rules and Cutter's Rules for a Dictionary Catalog. After each lecture students are required to catalog independently a number of books, and to modify the rules to suit different types of libraries. A month of independent cataloging for the University library follows the instruction in cataloging. Lectures on card catalogs and mechanical accessories. *I., II.; daily; 2; (5)*. Assistant Professor BECK.

2. ELEMENTARY REFERENCE.—The aim of this course is to train students in method of research and to familiarize them with the principal reference books. Lessons are assigned on reference books considered in groups, such as indexes, dictionaries, encyclopedias, atlases, hand-books of history, hand-books of general information, quotations, statistics, etc. Reference lists are prepared for special classes and for literary societies, and the students have practical work in the reference department of the library. *I., II.; section A, Tu., Th.; section B, W., F.; 1; (3)*. Assistant Professor SIMPSON.

3. SELECTION OF BOOKS.—Lectures are given upon methods and principles of selection for different libraries and subjects, and typical books chosen to illustrate each subject are discussed in class. The Publishers' Weekly and various critical periodicals are used to give students familiarity with new books. Representative new books are examined and received by each student and discussed in class with special reference to author and subject of each book, its special features, probable value in different types of libraries, and the extent to which it supplements or supersedes earlier books on the same subject. The work is continued as a part of Library 6. *I., II.; M.; 1; (2)*. Assistant Professor BECK.

4. ELEMENTARY LABORATORY COURSE.—The purpose of this work is to familiarize the students with the minor work of a library and to acquaint them with the books in the University library. Each student is given practical work in the mechanical preparation of books for the shelves, and in the copying of minor library records assigned as practice in library handwriting.

The care of the books in the stacks, including the reading of shelves, is assigned to the students, who are thus brought in contact with the books. *I., II.; daily; Lecture, M.; laboratory, 4 periods per week; 4; (3).* Miss HOWE.

Required: Library 1, 2.

5. **ADVANCED LIBRARY ECONOMY.**—Advanced and comparative cataloging and classification. Problems in organizing and reorganizing libraries. The class discusses questions affecting the founding and government of libraries, library legislation, library architecture, library administration, and current problems in public and college library work. This course includes one hour of Library 14. *I., II.; M., Tu., W., Th.; 4; F.; 3; (5).* Professor SHARP.

Required: Library 4.

6. **BIBLIOGRAPHY.**—Lectures on the principles underlying selection of books by professors from different departments. These lectures are supplemented with class work and problems from the librarian's point of view. Students in this course take the bibliography of history and the social sciences (Econ. 40). *I., II.; Tu., Th.; 3; (4).* Professor SHARP and others.

7. **HISTORY OF LIBRARIES.**—The history of the leading ancient, mediæval, and modern libraries. The library movement in the United States. Libraries are studied by types and by countries, with particular attention to the relation between the social, intellectual, and political movements in each country and the growth of libraries. This course is supplemented with Library 14 in a study of library reports and other publications. *I.; W.; 3; (2).* Assistant Professor SIMPSON.

8. **ADVANCED REFERENCE.**—Advanced reference books, including important transactions of societies, periodicals, special indexes, and other publications of special value in reference work in a university library. Reports on current events. Emphasis is laid upon problems in difficult research work. This course is intended primarily for students who are preparing for college library positions, but may be elected by any one who has satisfactorily completed Elementary Reference. *I.; W.; 3; (2).* Assistant Professor SIMPSON.

Required: Library 2.

9. **BOOK-MAKING.**—A brief history of writing, of the early forms of books, of the invention and spread of printing, of book illustration, and of the art and practice of binding. *II.; W.; 3; (2).* Professor SHARP.

10. **ADVANCED LABORATORY COURSE.**—This consists of independent technical work in the University library, averaging two hours a day through the year. Students revise class cataloging for review, classify and catalog new books, and have regular assignments at the reference desk. Each student is held accountable for the performance or supervision of some branch of work in the University library for one or two semesters. As a test of executive ability, each one is given several fourth year students as assistants. *I., II.; daily; Lecture, M.; 7; Laboratory, 9 periods per week; arrange time; (5).* Miss HOWE.

Required: Library 4.

11. **THESIS.**—Each student is required to prepare a thesis for graduation. This must be on some library topic, and must represent original research. An original bibliography, instead of a thesis, may be presented upon the approval of the director, or a seminar for research work on various topics to be suggested, may take the place of a thesis at the discretion of the director. *I., II.; arrange time; (2).* Professor SHARP.

12. **GENERAL REFERENCE.**—This course is offered to all students. It comprises lectures on the catalog, classification, the reference-room, the reading-room, and groups of books, such as indexes, dictionaries, encyclopedias, atlases, hand-books of general information, hand-books of history, statistics, quotations, etc. *I.; M.; 6:30 p. m.; (1).* Miss ROYCE.

13. **PUBLIC DOCUMENTS.**—This course covers the study of federal, state, and municipal documents, together with the study of the formation of government as expressed in its publications. Documents are studied both for their value as reference books and for correct methods of cataloging. Methods of printing and distribution, and important indexes, both general and special, are considered. Practical reference questions are given, and a sample catalog is made illustrating the various principles. The rules followed in this work are compiled by each student. *I., II.; W., F.; 7; (2).* Miss JACKSON.

Required: Library 1, 2.

14. **LIBRARY EXTENSION.**—Fourth and fifth year students meet together once a week to examine library publications and to consider them in their relation to library history, biography, and administration. Once a week the fourth year students alone meet to discuss such topics as library associations, library schools, library

commissions, traveling libraries, home libraries, and principles underlying the relation of the library to the public. *I., II.; M., F.; 3; (2).* Professor SHARP.

MATERIALS OF COMMERCE

1. AGRICULTURAL.—A study of the animals, grains, fruits, vegetables, and forage crops entering the channels of trade, together with a sketch of their manufactured products and by-products. *I.; Tu., Th.; arrange time; (2).* (Given by several instructors.)

2. CHEMICAL.—Classification and review of the chemical industries, including related lines which depend for their success upon chemical processes, followed by a study in detail of typical industries. *I., II.; arrange time; (2).* Professor PARR.

Required: Chemistry 1.

3. ZOOLOGICAL.—A study of the origin and uses of economic products derived from the animal kingdom, aside from those ordinarily classed as agricultural, as the products of the fisheries (marine and fresh water). of fur-bearing animals, bees, the silk worm, etc. Injuries by insects to stored merchandise and other manufactured property. *I.; W., F.; 1, 2; (2).* Assistant Professor SMITH.

See also Botany 8 and Geology 2.

MATHEMATICS

Professor SHATTUCK, Associate Professor TOWNSEND, Assistant Professor HALL, Assistant Professor RIETZ, Assistant Professor STEBBINS, Mr. MILNE, Dr. COAR, Mr. PONZER, Miss WHITE, Mr. LYTLE, and Mr. WILSON

1. ADVANCED ALGEBRA.—This course is offered for those students who wish to cover in five hours of mathematical work the subject of college algebra and that of plane and spherical trigonometry (Math. 3). The course presupposes a thorough working knowledge of elementary algebra through simultaneous quadratics. The same subjects are considered as in course 2. but more briefly. *I.; last seven weeks; daily; 3; (2).* Mr. MILNE.

¹2. ADVANCED ALGEBRA.—This course is for those students who wish to cover in five hours of mathematical work the subject of college algebra and that of plane trigonometry (Math. 4.)

The following topics are considered: Progressions, undeter-

¹Two sections, N, J, repeat the work in the second semester.

mined coefficients, binomial theorem, logarithms, permutations and combinations, probability, convergence of series (or determinants), and the theory of equations, with special reference to the solution of numerical equations of the third and fourth degree. *Sections A to O are for engineers, sections P to T are for students of the College of Science, and the College of Literature and Arts. I.; last eleven weeks; daily; section A, 6; section B, 4; section C, 2; section D, 3; section E, 6; section F, 1; section G, 3; section H, 7; section I, 1; section J, 4; section K, 2; section L, 7; section M, 3; section N, 8; section O, 3; section P, 4; section Q, 6; section R, 7; section S, 2; section T, 3; (3).* Assistant Professor HALL, Assistant Professor RIETZ, Mr. MILNE, Dr. COAR, Mr. PONZER, Miss WHITE, Mr. LYTLE, Mr. WILSON.

3. PLANE AND SPHERICAL TRIGONOMETRY.—This course covers the same ground in plane trigonometry as course 4. In addition to the work outlined there, about four weeks are spent on the general principles and applications of spherical trigonometry. *I.; first eleven weeks; daily; 3; (3).* Mr. MILNE.

Required: Solid and Spherical Geometry.

4. PLANE TRIGONOMETRY.¹—Sections A to O are for engineers, sections P to T are for students of the College of Science, and the College of Literature and Arts. *I.; first seven weeks; daily; section A, 6; sections B, 4; section C, 2; section D, 3; sections E, 6; section F, 1; section G, 3; section H, 7; section I, 1; section J, 4; section K, 2; section L, 7; section M, 3; section N, 8; section O, 3; section P, 4; section Q, 6; section R, 7; section S, 2; section T, 3; (2).* Assistant Professor HALL, Assistant Professor RIETZ, Mr. MILNE, Dr. COAR, Mr. PONZER, Miss WHITE, Mr. LYTLE, Mr. WILSON.

Section U is taught on Tuesdays and Thursdays throughout the first semester, at the eighth hour, for students registered in the preliminary medical course.

6. ANALYTICAL GEOMETRY.—The aim is to acquaint the student with analytical methods of investigation and to familiarize him with the general properties of conics, including a discussion of the general equation of the second degree and its geometrical interpretation. Special emphasis is placed upon the use of algebraic processes as a means of demonstrating geometrical properties of loci. To this is added a brief course on the analytical geometry of three dimensions, including co-ordinate systems in space, the relations of points, straight lines, and planes in space, as also the general properties of

¹Two sections, N, J, repeat the work in the second semester.

surfaces of second order. Sections A to O are for engineers, sections P to R are for students of the College of Science, and the College of Literature and Arts. *II.*; *daily*; *section A*, 6; *section B*, 4; *section C*, 2; *section D*, 3; *section E*, 6; *section F*, 1; *section G*, 3; *section H*, 7; *section I*, 1; *section J*, 4; *section K*, 2; *section L*, 7; *section M*, 3; *section N*, 8; *section O*, 3; *section P*, 4; *section Q*, 6; *section R*, 2; (5). Assistant Professor HALL, Assistant Professor RIETZ, Mr. MILNE, Dr. COAR, Mr. PONZER, Miss WHITE, Mr. LYTLE, Mr. WILSON.

Required: Mathematics 1, 3 or 2, 4.

7. DIFFERENTIAL CALCULUS.—The principles of the differential calculus are developed and applied to functions of one and of several variables, with special reference to the needs of engineering students. *I.*; *section A*, 1; *section B*, 1; *section C*, 1; *section D*, 6; *section E*, 6; *section F*, 6; *section G*, 3; *section H*, 3; *section I*, 1; *section J*, 1; (5). Assistant Professor HALL, Assistant Professor RIETZ, Dr. COAR, Mr. MILNE, Mr. PONZER, Miss WHITE.

Required: Mathematics 6.

8a. DIFFERENTIAL AND INTEGRAL CALCULUS.—A general introduction to the principles of differential and integral calculus. *I.*; *I.*; (5). Associate Professor TOWNSEND.

Required: Mathematics 6.

8b. DIFFERENTIAL AND INTEGRAL CALCULUS (Advanced course).—A continuation of 8a. The application of calculus to geometry and mechanics, begun in 8a, is extended throughout the course. *I.*, *II.*; *Tu.*, *Th.*; 6; (2). Associate Professor TOWNSEND.

Required: Mathematics 8a.

9. INTEGRAL CALCULUS.—This course together with mathematics 7 constitutes a year's continuous work in calculus. The general principles of the integral calculus are developed with usual applications to geometry, centers of gravity, moments of inertia, etc. A brief introduction to ordinary differential equations is also included. *II.*; *section A*, 1, *M.*, *W.*, *F.*; *section B*, 1, *M.*, *W.*, *F.*; *section C*, 1, *M.*, *W.*, *Th.*; *section D*, 6, *M.*, *Tu.*, *Th.*; *section E*, 6, *M.*, *Tu.*, *Th.*; *section F*, 6, *M.*, *W.*, *F.*; *section G*, 3, *M.*, *W.*, *Th.*; *section H*, 3, *M.*, *W.*, *Th.*; *section I*, 1, *Tu.*, *Th.*, *F.*; *section J*, 1, *Tu.*, *Th.*, *F.*; (3). Assistant Professor HALL, Assistant Professor RIETZ, Mr. MILNE, Dr. COAR, Mr. PONZER, Miss WHITE.

Required: Mathematics 7.

10. THEORY OF EQUATIONS.—A continuation of the theory of

equation given in college algebra (Math. I, 2). It is based on *Burnside and Panton's Theory of Equations, Part I. II; M., W., F.; 7; (3)*. Associate Professor TOWNSEND.

Required: Mathematics 2, 4 (or 1, 3), 6.

11. THEORY OF DETERMINANTS.—The general principles and properties of determinants, including determinants of special form and the functional determinants—Jacobians, Hessians, Wronskians. The application of determinants to the theory of equations, analytical geometry including linear transformation. *II.; Tu., Th.; 7; (2)*. Assistant Professor HALL.

12. THEORY OF INVARIANTS.—The general development of the theory of invariants, both from the geometric and from the algebraic side. Applications of invariants to systems of conics and higher plane curves. *I.; M., W., F.; 7; (3)*. Assistant Professor RIETZ.

Required: Mathematics 8b (or 9), 11.

13a. FUNCTIONS OF REAL VARIABLES.—The two courses in functions (13a, 13b) are a continuation of the work done in calculus (8a, 8b, or 7, 9). Under functions of real variables, considerable attention is given to the fundamental ideas of the analysis, including rational and irrational numbers, *mengenlehre*, single and double limits and their application to questions of continuity of functions of one or two variables, uniform, convergence of series, etc. The existence of derivatives, condensation of singularities, definite integrals, differentiation and integration of series are also discussed. *I., II.; M., W., F.; 8; (3)*. Associate Professor TOWNSEND.

Required: Mathematics, 8a, 8b (or, 7, 9), 10.

13b. FUNCTIONS OF A COMPLEX VARIABLE.—A general introduction to the theory of functions of a complex variable. The methods of Weierstrass and Riemann are followed. *I., II.; M., W., F.; 8; (3)*. Associate Professor TOWNSEND.

Required: Mathematics 8a, 8b (or, 7, 9), 10.

14. METHOD OF LEAST SQUARES.—The fundamental principles of the subject. The following subjects are studied: Law of probability and error, adjustment of observations, precision of observations, independent and conditional observations, etc. *I.; Tu., Th.; 6; (2)*. Assistant Professor STEBBINS.

Required: Mathematics 8a, or 9.

15. SEMINARY AND THESIS.—*I., II.; Tu., Th.; 8; (3)*. Associate Professor TOWNSEND.

16. DIFFERENTIAL EQUATIONS.—For students in the courses of

engineering and of mathematics and of astronomy. It embraces the following topics: General linear equations with constant coefficients, special forms of differential equations of higher order, integration in series, etc. *I.*; *M.*, *W.*, *F.*; 4; (3). Professor SHATTUCK.

Required: Mathematics 8a, or 9.

17. SOLID ANALYTIC GEOMETRY.—A general review of the position of the plane and the right line in space and the more general properties of surfaces of the second degree. The classification and special properties of quadratics, and a brief introduction to the theory of surfaces in general. *II.*; *M.*, *W.*, *F.*; 2; (3). Associate Professor TOWNSEND.

Required: Mathematics 8a (or 7), 11.

18. HIGHER PLANE CURVES.—This course includes the general theory of algebraic curves, together with the application of the theory of invariants to higher plane curves. Special study is made of curves of the third and fourth order. *II.*; *M.*, *W.*, *F.*; 7; (3). Assistant Professor RIETZ.

Required: Mathematics 12.

20. CALCULUS OF VARIATIONS.—This course has for its aim merely to acquaint the student with those elements of the science which are most needed in the study of the higher subjects of mathematical astronomy and physics. *II.*; *M.*, *W.*, *F.*; 4; (3). Professor SHATTUCK.

Required: Mathematics 11, 16.

21. SPHERICAL HARMONICS.—This course is introduced by a short course of lectures and study of certain trigonometric series. Fourier's Theorem for developing any function of a variable in a series proceeding in sines and cosines of multiples of the variable is derived and the limitations of its validity investigated. This is followed by the study of Lagrange's, Laplace's, and Lamé's functions and their applications to astronomical and physical problems. *I.*; *M.*, *W.*, *F.*; 6; (3). Assistant Professor HALL.

Required: Mathematics 11, 14, 16.

22. POTENTIAL FUNCTION.—The potential function is defined and its properties derived and discussed. The potential of various bodies, such as of wire, a spherical shell, a sphere, ellipsoid of revolution, etc., is computed. Poisson's and Laplace's Equations are derived and discussed. Green's propositions with kindred and similar subjects are considered. *II.*; *M.*, *W.*, *F.*; 6; (3). Assistant Professor HALL.

Required: Mathematics 21.

23. MODERN GEOMETRY.—This course includes, in general, a consideration of homogeneous coördinates, duality, descriptive and metrical properties of curves, anharmonic ratios, homography, in volution, projection, theory of correspondence, etc. *I.*; *M.*, *W.*, *F.*; 7; (3). Dr. COAR.

Required: Mathematics 8a or 7, 11.

24. ALGEBRAIC SURFACES.—In this course are considered the application of homogeneous coördinates and the theory of invariants to geometry of three dimensions, and also the general theory of surfaces, together with the special properties of surfaces of the third and fourth order. *II.*; *M.*, *W.*, *F.*; 7; (3). Dr. COAR.

Required: Mathematics 17, 18.

25. PARTIAL DIFFERENTIAL EQUATIONS.—It deals with the integration and determination of the integration constants of such partial differential equations as arise in the study of such subjects as the flow of heat, the vibration of strings, plates, etc., and electricity. *II.*; *Tu.*, *Th.*; 7; (2). Associate Professor TOWNSEND.

Required: Mathematics 8a or 9, 16.

26. STATISTICAL ADJUSTMENTS.—A course in statistics, theoretical and applied. For the convenience of students, it is given in two parts, of which the first may be taken alone or in connection with the second. The two parts, when taken with zoölogy 12, or economics 23, may be counted as a five-hour course in mathematics.

(a) Theory of Statistical Adjustments.—The general method of statistical investigation, the use and abuse of the arithmetical and the geometrical average, application of averages to tabulation, graphic method of deducing the law of error, interpolation, and the application of the theory of probability to statistics. *II.*; *M.*, *W.*, *Th.*, *F.*; *first 9 weeks*; 2; (2). Mr. MILNE.

Required: Mathematics 8a.

(b) Applications.—Applications of the principles developed in (a) to specific problems in economics, biological sciences, etc. *II.*; *M.*, *W.*, *Th.*, *F.*; *last 9 weeks*; 2; (2). Mr. MILNE.

Required: Mathematics 8a, 26a.

COURSES FOR GRADUATES

Courses 12, 13, 14, 15, 18, 20, 21, 22, 23, 24, 25 and 26 may be counted as graduate work for those students making a major in mathematics.

MECHANICAL TECHNOLOGY

See General Engineering Drawing 1b, Civil Eng'g 24, Mech. Eng'g 1, 30, 31, and Ry. Eng'g 9.

MECHANICAL ENGINEERING

Professor BRECKENRIDGE, Assistant Professors GOODENOUGH, LEUTWILER, RANDALL and PERRY, Mr. CURTISS, Mr. JONES, Mr. WILSON, Mr. SNODGRASS, Mr. SCROGGIN, Mr. HARMAN, Mr. KUSS

1. SHOP PRACTICE.—The course in shop practice consists of a suitably graded series of exercises, some of which are chosen from parts of machines under construction in the shops. The following is an outline of the work:

(a) Wood Shop and Foundry, 30 weeks.—Care and use of tools; exercises in the construction of joints; turning pattern and corebox making; management of the cupola; molding, including the making of dry and green sand cores.

(b) Forge Shop, 6 weeks.—Forging, welding iron and steel; tempering lathe and planer tools; annealing and case hardening.

The students are required to make inspection trips to commercial shops in the vicinity and take notes on methods and processes. *I., II.; alternates with G, E, D, 4 sections; 1, 2, 3, 6, 7, 8; (3).* Assistant Professor PERRY, Mr. CURTISS, Mr. JONES, Mr. WILSON.

2. MACHINE SHOP PRACTICE.—Regular lectures are given on the use of tools and on machine shop processes. The character of the work done is indicated in the following outline:

First Semester.—Exercises in chipping and filing; elementary work on lathe, drill presses and shaper.

Second Semester.—Fitting and bench work; advanced work on lathe, planer, shaper, milling machine, grinding machine, screw machine, gear cutter, and boring mill.

Visits of inspection are made to shops in the adjoining cities.

I., II.; daily; 1, 2, 3, 6, 7, 8 (divides time with M. E. 4); (2½). Assistant Professor PERRY, Mr. SCROGGIN.

3. POWER MEASUREMENT.—This course includes a study of the apparatus used in engine and boiler tests—scales, thermometers, indicators, brakes and dynamometers, gauges, calorimeters, etc. The methods of calibrating and using such apparatus are taught. Tests for indicated horse-power are made on steam engines, pumps, and

gas engine. Students are required to make reports on all experiments undertaken. *II.*; *section A1*, *Th.*, 6, 7, 8; *S.*, 1, 2, 3; *section A2*, *S.*; 2, 3, 4; *M.*, 6, 7, 8; *section B1*, *M.*, 1, 2, 3; *Tu.*, 6, 7, 8; *section B2*, *M.*, *Tu.*, 6, 7, 8; (2). Assistant Professor RANDALL, Mr. SNODGRASS.

Required: Mechanical Engineering 1, 2; Math. 9.

4. ELEMENTS OF MACHINE DESIGN.—The aim of this course is to familiarize the student with machine elements, such as bolts, keys, journals, bearings, couplings, gears, etc. Problems are given requiring simple calculations for strength. Considerable attention is paid to forms of gear teeth and to spur and bevel gears.

Outline of the Subject.—Fastenings; riveted joints and boiler stays; journals, pivots, shafts; bearings; forms of gear teeth; spur gears; bevel gears; cams, stepped cones for open belts; point paths. *Kent's Mechanical Engineer's Pocket-book*; also *Unwin's Machine Design*. *I.*, *II.*; *daily*; 1, 2, 3, 6, 7, 8 (*divide time with M. E. 2*); (2½). Mr. HARMAN.

Required: General Engineering Drawing 1.

5. MECHANISM (Kinematics of Machinery).—The methods of Reuleaux are followed. The following is an outline of the work done: Analysis of mechanisms with tests for constraint; study of plane motion by the method of virtual centers; velocity diagrams for steam-engine and quick-return mechanisms; application of kinematic principles to gear trains, cam trains, ball and roller bearings. *Durley's Kinematics of Machines*. *I.*; *section A*, *Tu.*, *Th.*, 2; *W.*, 6, 7, 8; *section B*, *M.*, *Th.*, 3; *S.*, 2, 3, 4; (3). Assistant Professor GOODENOUGH.

Required: Physics 1 and 3.

6. HEAT ENGINES.—The principles of thermodynamics are applied to the study of the modern heat engines. Special attention is given to steam turbines and gas engines. *II.*; *section A*, *Tu.*, *Th.*, 1; *section B*, *Tu.*, *Th.*, 6; (2). Assistant Professor GOODENOUGH.

Required: Mechanical Engineering 7.

7. THERMODYNAMICS.—This course includes the fundamental laws underlying the transformation of heat into work, the properties of perfect, saturated and superheated vapors, including ammonia, and the application of thermodynamic principles to refrigeration, air compression, flow of fluids, the injector, etc. The solution of a

large number of problems is required. *I.*; *section A, M., W., F., 1*; *section B, M., W., F., 4*; (3). Assistant Professor GOODENOUGH.

Required: Theoretical and Applied Mechanics 7, 8, 9, 10.

8. MECHANICS OF MACHINERY.—The principles of theoretical mechanics are applied to various classes of machinery. The work is varied from year to year, but includes some of the following topics: Hoisting machinery; air compressors; fans and blowers; pumping machinery; hydraulic machinery; the locomotive; friction in machine parts; governors; balancing of engines. *I.*; *section A, Tu., Th., 1*; *section B, Tu., Th., 3*. *II.*; *section A, M., W., F., 1*; *section B, M., W., F., 6*. Assistant Professor LEUTWILER.

Required: Theoretical and Applied Mechanics 1, 7, 8, 9, 10; Mechanical Engineering 5, 7.

9. ADVANCED MACHINE DESIGN.—In this course three lines of work are undertaken:

(a) DESIGN OF MACHINE TOOLS, such as lathes, shapers, slotters and milling machines. The design of attachments to existing machines or the complete design of some machine that can be built in the shops is often a part of this work.

(b) ORIGINAL DESIGN.—This includes the design of automatic machines, requiring a considerable invention on the part of the student. Often a single piece is handed to the student and a machine is required that will produce a given number of these pieces per hour.

(c) ADVANCED DESIGN.—The design of machinery subjected to heavy and variable stresses, such as punches, shears, presses, riveters, cranes, derricks, heavy pumps and motors.

Study of existing machines is required. The student is taught to consult standard works on machine design, such as *Unwin*, *Reuleaux*, and *Bach's Maschinenelemente*. *I.*; *section A, M., W., F., 2, 3, 4, 7, 8*; *section B, M., W., F., 1, 2, 3*; (3). *II.*; *M., W., F., 2, 3, 4*; (3). Assistant Professor LEUTWILER.

Required: Theoretical and Applied Mechanics 7, 8, 9, 10; Mechanical Engineering 1 to 8.

10. ESTIMATES, SPECIFICATIONS, AND SUPERINTENDENCE.—Calculations and estimates as to the cost of machinery, power plants, boilers, chimneys, systems of piping, engines and their foundations, different methods of power transmission. Forms of contracts and specifications are studied. *II.*; *Tu., 2, 3*; (1). Professor BRECKENRIDGE.

Required: Theoretical and Applied Mechanics 7, 8, 9, 10.

11. STEAM ENGINES AND BOILERS.—For students in other departments of the College of Engineering. The course includes the construction, operation, and care of boilers and engines; elementary thermodynamics; the indicator and indicator diagrams; compounding, jacketing, and superheating; condensers; steam engine performance. *II.; section G, Tu., W., F., 4; section H, M., Tu., Th., 3; sections E and I, M., W., F., 2; section C, Tu., Th., F., 1; section D, M, W., 1; Th., 2; (3).* Mr. KUSS.

12. MECHANICAL ENGINEERING LABORATORY.—This course includes experiments on engines, pumps, boilers, injectors, air compressors, hoisting appliances, etc.; also experiments with the transmission dynamometer on the power required by shop machinery. Tests of power plants in the vicinity are made. By special arrangement with the management of the Peoria and Eastern Railroad, the Urbana shops and power plant are made available for experimental work. The railway test car affords opportunity for tests in the line of railway engineering. In some cases groups of students are assigned advanced constructive work in the shops to impress upon them the intimate relation existing between the shop and designing room. *Carpenter's Experimental Engineering. I.; section A, Th., F., 6, 7, 8; S., 1, 2, 3; section B, M., W., 6, 7, 8; S., 1, 2, 3; (3). II.; section A, F., 6, 7, 8; section B, Tu., 7, 8, 9; (1).* Professor BRECKENRIDGE, Assistant Professor RANDALL, and Mr. SNODGRASS.

Required: Theoretical and Applied Mechanics 7, 8, 9, 10; Mechanical Engineering 1 to 7.

13. MECHANICAL ENGINEERING LABORATORY.—This is a laboratory course for students in other departments of the College of Engineering. It includes the testing and calibration of instruments and apparatus, use of the indicator, calculation of horse-power and steam consumption, reading of indicator diagrams, and valve setting. *I.; section F1, M., 6, 7, 8; section F2, W., 2, 3, 4. II.; section G1, W., 2, 3, 4, 6, 7, 8; section G2, M., W., 2, 3, 4; (2).* Assistant Professor RANDALL and Mr. SNODGRASS.

18. GRAPHIC STATICS OF MECHANISM.—This course is divided into two parts. The first part includes the general principles of graphic statics and the analysis of stresses in cranes and simple trusses. The second part deals with the graphical analysis of machines, taking account of sliding, journal and pivot friction, chain friction, rope stiffness, etc. *Graphical Statics of Mechanism, Herr-*

man-Smith. *Hoskin's Graphic Statics*. I.; section A, M., Th., 6, 7, 8; section B, Tu., F., 6, 7, 8; (2). Mr. KUSS.

Required: Theoretical and Applied Mechanics 7, 8.

19. SEMINARY.—The work of this course supplements the other studies of the senior year. Papers on subjects relating to current engineering practice are read and discussed. Each student subscribes for a technical journal. The indexing of current engineering literature is a part of the work of this course. I.; Tu., 6, 7; II.; Th., 3, 4; (1). Professor BRECKENRIDGE.

20. SHOP PRACTICE FOR SPECIAL STUDENTS.—This course is open to those entering as special students, as defined elsewhere under "Admission." The work done does not count for a credit for graduation in any of the technical courses. *Arrange time*. Mr. SCROGGIN.

21. FORGE SHOP PRACTICE.—This course is designed for students taking the course in Agriculture. Instruction is given in forging, such as will be of use to the practical farmer. The course may be started at the beginning or middle of either semester. *Arrange time at 1, 2, 3, or 6, 7, 8; six hours a week; (2)*. Mr. JONES.

22. WOOD SHOP PRACTICE.—This course is intended for students taking the course in Agriculture. Students should arrange with the instructor for nine hours' work each week. I. or II.; 1, 2, 3, or 6, 7, 8; (3). Mr. CURTISS.

23. STEAM ENGINEERING.—The following topics are included in the course: General description of boilers, engines, condensers, pumps, and other steam machinery, thermodynamics of gases and steam; compounding, superheating, jacketing, etc.; mechanics of the steam engine; valve gears. *Spanglers' Steam Engineering and Ripper's Steam Engine Theory*. II.; Sections A, M., W., 1; F., 4; Tu. 6, 7, 8; section B, Tu., Th., F., 2; Th., 6, 7, 8, (4). Mr. KUSS.

Required: Theoretical and Applied Mechanics 7, 8.

25. ADVANCED KINEMATICS.—This course includes the following: Study of the velocity states of mechanisms by the method of velocity images and polygons. Acceleration constructions: Coriolis' law and its applications. II.; W., 4; W., F., 6, 7, 8. Assistant Professor GOODENOUGH.

Required: Mechanical Engineering 5.

26. ADVANCED SHOP PRACTICE.—An electric course for juniors or seniors who desire to take up advanced work in any of the shops.

The work may include the construction of commercial machinery, the construction of apparatus or machines originally designed by the student, or a study of modern shop processes especially those relating to the production of interchangeable parts by means of jigs and templates. The work may be begun in either semester. Time and credits will be arranged. Assistant Professor PERRY and Mr. SCROGGIN.

Required: Mechanical Engineering 1, 2.

27. ADVANCED LABORATORY PRACTICE.—This course provides senior students an opportunity to take up special research work in the mechanical engineering laboratory. The character of the work will depend upon circumstances. Time and credits will be arranged by consultation. Professor BRECKENRIDGE and Assistant Professor RANDALL.

Required: Mechanical Engineering 3, 12.

29. SEMINARY FOR JUNIORS.—The work of this course requires a study of technical publications and the presentation of abstracts of important articles on engineering topics. It will include also a study of the various technical indexes, methods of classification, and filing systems for clippings, catalogs, and drawings. *I.; Th., 1; II.; F. 3; (1).* Professor BRECKENRIDGE.

Required: Rhetoric 2.

30. MACHINERY AND MANUFACTURING.—Construction, operation and erection of "form changing machines." A study of machinery that transforms raw material into a finished product. Manufacture vs. building; hand labor vs. automatic machinery; the American system of interchangeable machine parts. *II.; M., W., F.; 4; (3).* Assistant Professor LEUTWILER.

31. GENERATION AND TRANSMISSION OF POWER.—Elementary principles of generation and transmission of power. Applications of power for purposes of agriculture, manufacturing, mining, and transportation on land and water *II.; M., W., F.; (3).* Professor BRECKENRIDGE.

33. THESIS.—Each senior student is required to take up some special subject of investigation and prepare a thesis embodying a review of the literature of the subject, the results of his investigation and a discussion of those results. During the second semester weekly reports are required. A credit of three semester hours is given, but the work may require for its completion more time than

a three-semester hour subject. *II.*; (3). Professor BRECKENRIDGE, Assistant Professors GOODENOUGH, LEUTWILER, RANDALL, and PERRY.

COURSES FOR GRADUATES

Primary

- 101. Advanced Machine Design.
- 102. Graphics and Kinematics.
- 103. Mill Engineering.
- 104. Steam Engineering.
- 105. Experimental Engineering.
- 106. Thermodynamics.
- 107. Pneumatics.
- 108. Hydraulic Machinery.
- 109. Mechanical Technology.
- 110. Translation of Technical Engineering Work.
- 111. Heat Engines and Gas Engineering.
- 112. Locomotive Engineering.
- 113. Mechanical Refrigeration.

Secondary

120. Any primary offered in the College of Engineering.

Primary subjects may be taken as secondary in any course for the master's degree in the College of Engineering.

121. Indexing and Classification of Engineering Literature.

MECHANICS, THEORETICAL AND APPLIED

Professor TALBOT, Mr. SLOCUM, Mr. RICHEY, Mr. MOORE, Mr. ENGSTROM, Mr. CLARK.

4. APPLIED MECHANICS.—To be taken instead of Analytical Mechanics. The course of study and topics studied will be nearly identical. *Wright's Mechanics*. *I.*; *M.*, *Tu.*, *W.*, *Th.*; 1; (4). Mr. CLARK.

Required: Mathematics 6.

5. STRENGTH OF MATERIALS.—To be taken instead of Resistance of Materials. The course of study will be nearly the same, though somewhat simplified. *Merriman's Mechanics of Materials*. *II.*; *M.*, *Tu.*, *W.*, *Th.*; 3; laboratory, *M.*, 7, 8; (4). Mr. SLOCUM, Mr. CLARK.

Required: Mathematics 6; Theoretical and Applied Mechanics 4.

6. ENGINEERING MATERIALS.—This course embraces weekly lectures on the properties and requirements for materials used in engineering construction, the effect of methods of manufacture upon the quality of the material and the specifications and standard tests used to secure acceptable grades of material. *I.*; section *A*, Tu.; 3; section *B*, Tu.; 6; (1). Professor TALBOT.

Required: Registration in Thero. and App. Mechanics 9.

7, 8. ANALYTICAL MECHANICS.—The mechanics of engineering, rather than that of astronomy and physics, is here considered. Attention is given to fixing the fundamental concepts and demonstrating the general principles of equilibrium and motion and also to the application of principles and methods to numerous and varied engineering problems. Training in the statement of conditions and in the use of data is given. This subject requires a thorough working knowledge of the mathematics preceding it in the course. The work begins in the second semester, and in the following semester it is given in connection with Theoretical and Applied Mechanics 9. *Maurer's Technical Mechanics*, 7, II.; section *A*, M.; 2; Tu., Th.; 1; section *B*, M.; 2; Tu., Th.; 1; section *C*, M., W.; 3; Th.; 2; sections *D* and *E*, Tu.; 4; W., F.; 6; section *F*, Tu., Th.; 6; F.; 8; sections *G*, *H*, and *K*, Tu.; 3; Th., F.; 4; sections *I* and *J*, M., W.; 1; F.; 3; (3). 8, I.; programme includes both *Theoretical and Applied Mechanics* 8 and 9; section *A*, daily; 3; section *B*, daily; 2; section *C*, Tu., W., Th.; 6; F.; 1, 6; section *D*, Tu., W., Th.; 6; F.; 3, 6; section *E*, daily; 1; section *F*, daily; 1; section *G*, daily; 2; section *H*, daily; 3; section *I*, daily; 4; (2½). Professor TALBOT, Mr. RICHEY, Mr. MOORE, and Mr. ENGSTROM.

Required: For 7, Mathematics 7; registration in Mathematics 9; for 8, mathematics 9; Theoretical and Applied Mechanics 7.

9. RESISTANCE OF MATERIALS.—In the treatment of this subject it is the aim to give the student a thorough training in the elementary principles of the mechanics of materials, to follow with such experiments and investigations in the materials laboratory as tend to verify the experimental laws, and to add such problems in ordinary engineering practice as will train the student in the use of his knowledge. Attention is also given to the quality and requirements for structural materials. *Merriman's Mechanics of Materials*. *I.*; Recitation program the same as *Theoretical and Applied Mechanics* 8; Laboratory; weekly; section *A1*, M., 1, 2; section *A2*, W.; 1, 2; section *A3*, F.; 6, 7; section *B1*, W.; 3, 4; sec-

tion B2, W.; 6, 7; section B3, F.; 3, 4; section C1, S.; 1, 2; section C2, S.; 3, 4; section D1, Th.; 1, 2; section D2, F.; 1, 2; section E1, W.; 3, 4; section E2, M.; 6, 7; section F1, M.; 3, 4; section F2, Th.; 6, 7; section G1, F.; 6, 7; section G2, Tu.; 6, 7; section H1, Tu.; 1, 2; section H2, Th.; 1, 2; (3½). Professor TALBOT, Mr. SLOCUM, Mr. RICHEY, Mr. MOORE, and Mr. ENGSTROM.

Required: Mathematics 9; Theoretical and Applied Mechanics 7; Registration in Theoretical and Applied Mechanics 8.

10. HYDRAULICS.—In hydraulics the instruction is by textbook and laboratory work. The laws of the pressure and the flow of water and its utilization as motive power are considered. Experimental work in the hydraulic laboratory gives training in the observation and measurement of pressure, velocity, and flow, in power and efficiency, and in the determination of experimental coefficients. *Merriman's Hydraulics. II.; Recitations; section A, M., W.; 2; section B, M., Th.; 4; section C, M., W.; 1; section D, Tu., Th.; 1; section E., Tu., Th.; 2; section F, Tu, F.; 6; section G, Tu., F.; 3; section H, W.; 4; F.; 2; section I, W.; 3; F.; 1; Laboratory, weekly; section A1, Tu.; 3, 4; section A2, F.; 1, 2; section A3, W.; 3, 4; section B1, S.; 1, 2; section B2, W.; 1, 2; section B3, M.; 1, 2; section C1, Tu.; 6, 7; section C2, W.; 6, 7; section D1, M.; 6, 7; section D2, F.; 6, 7; section E1, M.; 6, 7; section E2, S.; 3, 4; section F1, Th.; 6, 7; section F2, Th.; 1, 2; section G1, M.; 3, 4; section G2, Th.; 3, 4; section H1, Tu.; 1, 2; section H2, F.; 3, 4; (3).* Professor TALBOT, Mr. SLOCUM, Mr. RICHEY, Mr. MOORE, and Mr. ENGSTROM.

Required: Mathematics 9; Theoretical and Applied Mechanics 9.

COURSES FOR GRADUATES

- 101. Analytical Mechanics.
- 102. Resistance of Materials.
- 103. Hydraulics and Hydraulic Engineering.
- 104. Laboratory of Applied Mechanics.

METEOROLOGY

See under Physical Geography and Geology 14.

MILITARY SCIENCE

Professor FECHET, Mr. PEGELOW, Mr. WAGENSEIL, Mr. ROTHGEB

1. THEORETICAL INSTRUCTION.—Infantry drill regulations. For all male students. *II.*; (*I*). Mr. PEGELOW, Mr. WAGENSEIL, Mr. ROTHGEB.

2. PRACTICAL INSTRUCTION.—Infantry.—School of the soldier; company and battalion; evolution of the regiment. Artillery.—School of the cannoneer and battery dismounted. Freshman and sophomore years. *I., II.*; (*I*). Professor FECHET.

3. THEORETICAL INSTRUCTION.—Sophomore, junior and senior years; one hour each week. Drill regulations, military administration, field engineering, and elements of military science. This course is obligatory upon commissioned officers and sergeants, optional with corporals, and open to others. Professor FECHET.

Authorized text-books.—*United States Army Drill Regulations; United States Army Regulations; Manual of Field Engineering (Beach); Elements of Military Science (Wagner).*

MINERALOGY

See under Geology 5, 6, 7, 10.

MUNICIPAL AND SANITARY ENGINEERING

Professor TALBOT, Professor BURRILL, Mr. SLOCUM, and Mr. ENGSTROM.

2. WATER SUPPLY ENGINEERING.—This subject is intended to cover the principal features of the construction of water works, including the tests and standards of purity of potable water; the choice of source of supply; the designing of the distribution system, pumps and pumping machinery, reservoirs, and stand pipes. *Lectures; Turneure's Public Water Supplies. I.; section A, M., W., F.; 2; Th.; 6, 7, 8; section B, M., W., F.; 3; Tu.; 2, 3, 4; section C, M., W., F.; 1; Th.; 1, 2, 3; (4)* Professor TALBOT and Mr. SLOCUM.

Required: Theoretical and Applied Mechanics 9, 10; Chemistry 1; Mechanical Engineering 11.

3. SEWERAGE.—The design and methods of construction of sewerage systems of cities, including the following: Sanitary necessity of sewerage; water carriage systems, both separate and com-

bined; surveys and general plans; hydraulics of sewers; relation of rainfall to storm water flow, and determination of size and capacity of sewers; house sewage and its removal; form, size, design, and construction of sewers and sewer appurtenances; modern methods of sewage disposal; estimates and specifications. *Lectures; Folwell's Sewerage; II.; section A, Tu., Th.; 1; M.; 6, 7; section B, Tu., Th.; 3; Th.; 6, 7, 8; section C, Tu., Th.; 2; F.; 2, 3, 4; (3).* Professor TALBOT and Mr. SLOCUM.

Required: Theoretical and Applied Mechanics 9, 10; Chemistry I.

5a. BACTERIOLOGY.—For students in Municipal Engineering. This course includes the identification and classification of bacteria, and of allied organisms, their relations to health and to disease, the methods of separation and cultivation, and the methods of air and water analysis. The laboratory is furnished with sterilizers, culture ovens, microscopes, etc., and students have abundant opportunity to do practical work. This course follows Civil Engineering 4a. *I.; last 7 weeks; daily; 6, 7; (2).* Professor BURRILL.

6a, b. WATER PURIFICATION, SEWAGE DISPOSAL, AND GENERAL SANITATION.—This work includes the consideration of impurities in water supplies and the study of the methods and processes of their removal; the modern methods of sewage disposal by filtration, chemical precipitation, irrigation, etc., with a study of representative purification plants; garbage collection and disposal; sanitary restrictions and regulations and general sanitation. *Lectures, seminary work and drafting. 6a, I.; 3; Tu., Th.; 4; Tu.; 6, 7, 8; 6b, II.; M., W.; 2, 3, 4; F., 4; (3).* Professor TALBOT and Mr. ENGSTROM.

Required: Municipal and Sanitary Engineering 2, 3, 5a; Chemistry I, 3a, 10

COURSES FOR GRADUATES

Water Supply Engineering

101. Tanks, Stand-Pipes, and Reservoirs.
102. Sources and Requirements of Water Supply for a City and Removal of Impurities.
103. Water Works Management and Economics.
104. Pumps and Pumping.
105. General Water Works Construction.
106. Biological and Chemical Examination of Potable Water.
107. Description of Water Supply Systems.

Sewerage

- 111. Sewage Purification.
- 112. Sewage Disposal Works.
- 113. General Sewerage Design and Construction.
- 114. City Sanitation.
- 115. Description of Sewerage Systems.

Road Engineering

- 118. Economic Aspect of Good Roads and Pavements.
- 119. Construction of Roads and Pavements.

Miscellaneous Subjects

- 121. Critical Description of Engineering Construction.
- 122. Translation of Technical Engineering Work from French or German.
- 123. Any Primary in Civil Engineering.
- 124. Any Primary in Theoretical and Applied Mechanics.
- 125. Any Primary in Mathematics, Mechanical Engineering or Electrical Engineering—Secondary.
- 126. Indexing of Municipal and Sanitary Engineering Literature in Engineering Periodicals.

MUSIC

Professor LAWRENCE, Assistant Professor BRENNEMAN, Mrs. DANIELS, Mrs. BRENNEMAN, Miss MANN, Mr. SCHWARTZ, Miss HOWE, Miss GREENE, Mrs. SMITH, Miss FORBES

1. HISTORY OF MUSIC.—Lectures on the development of Music, referring especially to the rise of Polyphony and dramatic music, the origin and progress of the Oratorio, the evolution of instruments and instrumental forms, and studies in the lives of composers. Assigned collateral readings. *I. and II.*; (2). Mr. SCHWARTZ.

2. THEORY OF MUSIC.—Elementary Theory and Ear-training. Four Part Harmony, and Analysis. *I. and II.*; (2). Mr. SCHWARTZ, and Miss FORBES.

3. ADVANCED HARMONY AND ANALYSIS.—*I., II.*; (3). Mr. SCHWARTZ.

4. COUNTERPOINT, CANON, AND FUGUE.—*I., II.*; (3). Mr. SCHWARTZ.

5. GENERAL THEORY, FREE COMPOSITION.—*I., II.; (2½).* Mr. SCHWARTZ.

NOTE.—Music, 5, I. may be taken with course 4, II. if desired.

6. COURSE FOR THE PIANO.—*Preparatory.* This course covers three years' work and is required in fulfillment of the six credits prescribed for entrance to the School of Music. The work of each year counts two credits for entrance. It includes formation and position of fingers, hands, wrists, and arms, properties of touch, principles of technique, thorough drill in scale and arpeggio playing, and exercises in accent, rhythm, and expression. Music used:

(a) First year. National Graded Course. *Bk. I or equivalent; Köhler Op. 151.* Miss MANN and Miss HOWE.

(b). Second year. Music used,—Köhler Op. 50; Leoschorn Op. 65, Bk. 3; Duvernoy Op. 120; Kunz Canons (preparatory to Bach); Czerny Op. 636; Sonatines of Lichner, Berens, Kulau, Clementi, Diabelli, etc. Pieces of same grade. Miss MANN and Miss HOWE.

(c) Third Year.—Gorno Pedal Studies; Czerny Op. 299, Bks. 1 and 2; Wolff Octave Studies; Lawrence, Bach Preparatory Studies; Berens School of Velocity; Heller Studies, selected; Easier sonatas of Haydn, Mozart, etc. Miss MANN and Miss HOWE.

7. *Collegiate.* First Year. Studies in development of technique; Czerny, Op. 299 Bks. 3, 4; Czerny Octave Studies; Cramer, Etudes; Jensen, Etudes; Bach, Little Preludes and Fugues; sonatas of Haydn and Mozart; easier sonatas of Beethoven; Songs without Words, Mendelssohn; compositions (smaller works of Schubert, Raff, Grieg, Chaminade, Moszkowski, and others). *I., II.; (6).* Professor LAWRENCE and Mrs. DANIELS.

8. Second Year. Daily technique: Czerny, Op. 740; Mayer's Octave Studies; Pacher, Octave Studies; Bach, Two and Three-Voice Inventions, and French Suites; Sonatas and other compositions of Scarlatti, Beethoven, Schubert, Schumann, Mendelssohn, Weber, Raff Rubinstein, Saint Saens, Godard, MacDowell, and others. *I., II.; (6).* Professor LAWRENCE and Mrs. DANIELS.

9. Third Year. Selections: Clementi, Gradus ad Parnassum; Moscheles, Op. 70; Kullak, Seven-Octave Studies, Bk. 2; Bach, English Suites and Well-Tempered Clavichord; Sonatas and concertos by Mendelssohn, Weber, Beethoven, Hummel, etc.; selections from works of Bach, Chopin, Schubert, Schumann, Brassin. Rubinstein.

Liszt, Moszkowski, Scharwenka, and other modern composers. *I., II.; (8).* Professor LAWRENCE and Mrs. DANIELS.

10. Fourth Year. Selections: Octave Studies; Clementi, Gradus, continued; Bach, Well-Tempered Clavichord, continued; Chopin, Etudes; Henselt, Etudes; Rubinstein, Etudes; Sonatas by Beethoven, and concertos and other compositions by the great masters, classic and romantic, both of the older and the more modern schools. *I., II.; (9).* Professor LAWRENCE and Mrs. DANIELS.

11. COURSE FOR THE VOICE.—Preparatory. Covers three years' work and is required in fulfillment of the six credits prescribed for entrance to the School of Music.

(a) First Year. Exercises for correct breathing and for proper placing of the voice. Randegger's Singing and Sieber's 36 eight measure Vocalises will be used. Miss GREENE and Mrs. SMITH.

(b) Second Year. Breathing exercises. Tone production. Randegger's Singing. Sieber's 36 eight measure Vocalises, 25 studies from Concone's 50 lessons; simple songs for rhythm, accent, and enunciation. Miss GREENE and Mrs. SMITH.

(c) Third Year. Breathing exercises. Tone production. Randegger's Singing. Concone's 50 lessons completed. Panofka's Op. 85. Songs from Mendelssohn and modern composers. Miss GREENE and Mrs. SMITH.

12. COLLEGIATE. First Year. Tone production. Randegger's Singing continued. 25 and 40 Concone Studies. Sieber's School of Velocity. Songs from Schubert, Franz and modern composers. *I., II.; (6).* Assistant Professor BRENEMAN Mrs. BRENEMAN and Miss GREENE.

13. Second Year. Tone production. Sieber's School of Velocity continued. Panofka's studies Op. 81. Songs of German, French and English composers. Simple selections from operas and oratorios. *I., II.; (6).* Assistant Professor BRENEMAN and Mrs. BRENEMAN.

14. Third Year. Tone production. Sieber's School of Velocity continued. Bordogni's studies for soprano or tenor. Sieber or Bordese for alto or bass. Selections from oratorios and from French, German, and Italian composers. *I., II.; (8).* Assistant Professor BRENEMAN and Mrs. BRENEMAN.

15. Fourth Year. Tone production. Lutgen's opera-vocalisen, Bk. 2. Italian, French, and English songs of standard com-

posers. Solos and concerted works from modern and standard operas and oratorios. *I., II.; (9)*. Assistant Professor BRENEMAN and Mrs. BRENEMAN.

16. COURSE FOR VIOLIN.—*Preparatory*. Sitt: Op. 31, No. 1. Schradieck's Scale and Arpeggio Studies commenced; Meerts Elementary Etudes; Sitt: Double Stops, in part. Pieces by Weiss, Sitt, Reinecke, and Pleyel. Mr. SCHWARTZ and Miss FORBES.

17. *Collegiate*. First Year. Scales and Arpeggios in three Octaves; Sitt, Double Stops, completed. Kreutzer, David Violin School, Vol. II.; Sonatas by Handel and Schubert. Compositions by Dancla, Hauser, and Bohm. *I., II.; (6)*. Mr. SCHWARTZ and Miss FORBES.

18. Second Year. Scales in octaves and thirds, arpeggios on dominant and diminished seventh chords; David School completed, Fiorillo Etudes. Mozart Sonatas, Concertos by Viotti, Spohr, and others; Concert pieces by Sitt, Spohr, Alard, and others. *I., II.; (6)*. Mr. SCHWARTZ and Miss FORBES.

19. Third Year. Special technical drill. Meerts Etudes, Rode Caprices, Easier Modern Concertos and Sonatas; Concert pieces by Vieuxtemps, Sarasate, Foote, Cui. *I., II.; (8)*. Mr. SCHWARTZ and Miss FORBES.

20. Fourth Year. Selected Concert Etudes, Sonatas by Beethoven, Schumann, and Brahms; Various Modern and Classic Concertos. *I., II.; (9)*. Mr. SCHWARTZ and Miss FORBES.

NOTE.—All collegiate students are permitted to enter classes in which Trios, Quartets, and Quintets, by Beethoven, Mozart, and modern composers are studied. Ensemble and orchestral work is required of all special students who are sufficiently advanced.

21. UNIVERSITY ORCHESTRA.—Two hours' rehearsal once a week throughout the year. *I., II.; (1)*. Professor LAWRENCE.

22. UNIVERSITY CHORAL SOCIETY.—One hour rehearsal once a week throughout the year. *I., II.; (1½)*. Professor LAWRENCE.

23. EAR-TRAINING CLASSES are provided for all School of Music students. *I., II.*; Mrs. SMITH.

24. SIGHT-SINGING CLASSES are open to all University students. *I., II.* Mrs. SMITH.

25. PUBLIC SCHOOL METHODS.—Students are required to complete courses in Music I, 2, II, and must pursue work as follows: Two classes per week in sight-singing, methods of teaching, and conducting. The methods taught are the so-called "Modern,"

"Educational," "Natural," "Normal," "Model." A teacher's certificate is granted to all who successfully complete the course. *I.*, *II.* Mrs. SMITH.

PALEONTOLOGY

See under Geology *I*, 9.

PHILOSOPHY

Professor DANIELS

1. LOGIC.—The study of terms and propositions from the standpoint of their meaning. Practice in syllogistic reasoning. The last half of the course is devoted to the study of scientific method *I.*; *M.*, *W.*, *F.*; 8; (3). Professor DANIELS.

Required: One year of University work.

2. OUTLINES OF PHILOSOPHY.—A general introduction to the study of philosophy. *I.*; *M.*, *W.*, *F.*; 1; (3). Professor DANIELS.

Required: Two years of University work.

3. ANCIENT AND MEDIEVAL PHILOSOPHY.—A rapid survey of the development of speculative thought, beginning with the early Greek philosophers and continuing through the mediæval period. *I.*; *Tu.*, *Th.*; 8; (2). Professor DANIELS.

Required: Two years of University work.

4. MODERN PHILOSOPHY.—The formation and development of the problems and conceptions in philosophy from Descartes to the present time. Selections from the philosophical masterpieces of this period. Special emphasis is laid upon the philosophy of Kant. *II.*; *M.*, *W.*, *F.*; 1; (3). Professor DANIELS.

Required: Two years of University work.

5. POLITICAL PHILOSOPHY.—Political theories in modern philosophy beginning with Hobbes. The nature of the state, natural law and natural right. *II.*; *Tu.*, *Th.*; 1; (2). Professor DANIELS.

Required: Two years of University work.

7. HISTORY OF ETHICS.—The elements of ethics theoretical and applied. A survey of various types of ethical theory. *II.*; *M.*, *W.*, *F.*; 8; (3). Professor DANIELS.

Required: Two years of University work.

8. ESTHETICS.—A brief history and a critical study of the various theories of the beautiful. Lectures and assigned readings.

Open to senior and graduate students only. *II.; Tu., Th.; 8; (2).*
Professor DANIELS.

Required: Psychology 1 or 2, or an elementary course in Philosophy.

9. POLITICAL ETHICS, HISTORICAL AND APPLIED.—A discussion of rights and duties in relation to social institutions; international rights and duties; the ethics of diplomacy. *I.; Tu., Th.; 1; (2).*
Professor DANIELS.

Required: Two years of University work.

11. PHILOSOPHY OF RELIGION.—The philosophical interpretation of religious consciousness, with reference to the value of a rational view of religious ideas. Open to senior and graduate students only. *I., II.; Tu.; 7; (1).* Professor DANIELS.

13. PHILOSOPHY OF NATURE.—The relation of philosophy to scientific conceptions. Man's place in nature. The relation of mind and body. The views of Clifford, Pearson, Ostwald, and other modern writers. Open to senior and graduate students only. *II.; Tu., Th.; 8; (2).* Professor DANIELS. [Not given in 1905-1906.]

COURSES FOR GRADUATES

101. THE PHILOSOPHY OF KANT.

102. THE SEVENTEENTH CENTURY PHILOSOPHY.

PHYSICAL GEOGRAPHY

PHYSICAL GEOGRAPHY (Geology 8).—Three objects are aimed at in this course, viz: To promote the change in the method of teaching geography so generally advocated in recent years, to provide a rational basis for the study of geographic distribution of animals and plants, to place in their proper light the geographic factors in the history of man and his present well being.

The first part of the semester is devoted to a discussion of the general principles of meteorology, oceanography, and climatology. This is followed by a study of the physical geography of North America and Europe, with reference to the objects named above.

It is assumed that the student has a good understanding of political geography, and of the principles of land development, etc., as set forth in such works as *Davis's*, *Gilbert and Brigham's*, or *Tarr's Physical Geography*. *I., II., M., W., F.; 6 and 7; (3).* Professor ROLFE, Mr. JONES.

10. **TEACHER'S COURSE IN PHYSICAL GEOGRAPHY.**—This course is designed primarily for those who expect to teach. The work includes discussions of the most approved methods of presenting each topic in class room, field, and laboratory, and the use which can be made of local geography, topography and geology, together with the fauna and flora as illustrative material. It also includes the selection of topographic sheets issued by the United States Geological Survey which show well developed topographic types, and their proper use in the class room; the manufacture and use of models and all other means by which the principles of the science may be experimentally studied. It further includes observations on character of cloud, direction and velocity of wind, temperature and humidity of the air, and their relation to weather changes; the study of weather maps, and the construction and use of simple apparatus for meteorological observations. A study is made of the geographic elements which have combined to produce the peculiarities of surface and climate of selected regions and the effect which these combinations have had on the historical, commercial and industrial progress of their inhabitants. *I.; arrange time. (5).* Professor ROLFE, Mr. JONES.

Required: A good course in High School Physical Geography, or Geology 8.

For advanced work see under Geology 4, 103.

PHYSICAL TRAINING

Director HUFF, Mrs. LINCOLN, Mr. GILL, Mr. HANA, Mr. LENKE.

For Men

1. **GYMNASIUM PRACTICE.**—Two hours' class work, calisthenic drills and heavy apparatus work, each week. *Required of freshmen. Must be taken with course 3. I., II., arrange time; (½).* Mr. HANA, Mr. LENKE.

2. **GYMNASIUM PRACTICE.**—Three hours each week in advanced heavy apparatus work. *I., II., arrange time; (1).* Mr. HANA

Required: Physical Training 1 and 3.

3. Lectures upon personal hygiene once a week. *I., II., arrange time (½).* Mr. HANA.

For Women

7. PRACTICE.—Class and prescription exercises in the gymnasium and field. *I., II.; arrange time; (1).* Required of freshmen. Mrs. LINCOLN.

8. PRACTICE.—Second year. Elective, *I., II.; (1).* Mrs. LINCOLN.

Required: Physical Training 7, 9.

9. HYGIENE.—The same as Physiology 6, which see. *Required of all freshmen. I.; M; 9; (1);* Medical, Professor KEMP; Personal, Mrs. LINCOLN.

PHYSICS

Professor CARMAN, Assistant Professors KNIPP and WATSON, Mr. SCHULZ, Mr. SLUSS, Mr. BROWN

1. GENERAL PHYSICS.—Lectures with class-room demonstrations, recitations and written exercises. This course is required of students in engineering and is recommended to students with major work in physics and mathematics. The laboratory course, Physics 3, is to be taken at the same time. *I., II.; Lectures, M., W.; 4; Quiz, F.; 2, 3 or 4; I., (3); II., (2).* Professor CARMAN, Assistant Professor WATSON, Mr. SCHULZ, Mr. SLUSS, and Mr. BROWN.

Required: Mathematics 3 or 4.

3. INTRODUCTION TO PHYSICAL MEASUREMENTS.—Laboratory experiments running parallel with the lecture course. Physics *I., II.; one of the following three-hour periods each week; Tu., Th.; 2-4; Tu., Th.; 7-9; (2).* Assistant Professor WATSON, Mr. SLUSS, Mr. ———.

Required: Mathematics 3 or 4.

2a. GENERAL PHYSICS.—Lectures with class-room demonstrations and recitations. This course is similar to Physics 1 and is recommended for students in general science, medicine, and literature and arts. The laboratory course, Physics 2b, is to be taken with Physics 2a. *I., II.; Lectures, Tu., Th.; 4; Quiz, F.; 1; (2).* Professor CARMAN, Assistant Professor WATSON, Mr. BROWN.

Required: Mathematics 3 or 4.

2b. INTRODUCTORY LABORATORY PHYSICS.—A course of physical measurements to supplement the lecture course, Physics 2a. *I.,*

II.; S.; 2-4; (2). Assistant Professor WATSON, Mr. SLUSS, Mr. _____.

Required: Mathematics 3 or 4.

4a. ELECTRICAL AND MAGNETIC THEORY.—Lectures and recitations with occasional class-room demonstrations. This course, in connection with Physics 4b, is intended for juniors in electrical engineering and students whose major is physics. The course covers the elementary mathematical theory of electrostatics, magnetism, electro-magnetic induction, magnetic properties of iron, and direct, alternating, and polyphase currents. Text-book for 1905-6,—*Joubert's Electricity and Magnetism*, by Foster and Porter. I.; M., W.; section G, 3; section H, 2; (2). II.; M., W.; section H, 2; Th., F.; section G, 2; (2). Assistant Professor KNIPP.

Required: Physics 1 and 3, or 2a and 2b; Mathematics 7 and 9, or 8a, desired.

4b. ELECTRICAL AND MAGNETIC MEASUREMENTS.—Laboratory experiments in exact electrical and magnetic measurements running parallel with the lecture course. This course can be taken only in connection with Physics 4a or its equivalent. I.; section A, Tu., W.; 6-8; section B, Th., F.; 6-8; section C., M.; 6-8, and S.; 1-3; (2). II.; section A, M.; 6-8, and S.; 1-3; section B, Th., F.; 6-8; section C., Tu., W.; 6-8; (2). Assistant Professor KNIPP and Mr. SCHULZ.

Required: See Physics 4a.

15. SHORTER COURSE IN ELECTRICAL AND MAGNETIC MEASUREMENTS.—Recitations and laboratory. This is a one semester course for mechanical, civil, and chemical engineering students who wish an elementary working knowledge of electricity and magnetism, who do not have the time to devote a whole year to the subject. The recitations cover the elementary theory of electrostatics, magnetism, electro-magnetism, direct and alternating currents. In the laboratory a selected list of standard electrical and magnetic experiments is performed, the work running parallel with the recitations. I.; Recitations, Tu., Th.; 3; Laboratory, F.; 6-8, S.; 1-3; (4). Mr. SCHULZ.

Required: Physics 1 and 3, or 2a and 2b; Mathematics 3 or 4.

16a. HEAT.—Lectures and recitations with occasional class-room demonstrations. Discussions and demonstrations of fundamental heat phenomena are given, together with the elements of the

mechanical theory of heat. The course on Heat Measurement, 16b, is to be taken with this course. *I.*; *Tu., F.*; *1*; (*2*). Professor CARMAN and Assistant Professor WATSON.

Required: Physics 1 and 3, or 2a and 2b; Mathematics 7 and 9 advised.

16b. HEAT MEASUREMENTS.—Laboratory exercises including thermometry, calorimetry, determination of vapor pressure and density, melting and boiling points of substances, linear and cubical coefficients of expansion. This course is to be taken in connection with Physics 16a. *I.*; *Tu., F.*; 6-8; (*2*). Professor CARMAN and Assistant Professor WATSON.

Required: Physics 1 and 3, or 2a and 2b; Mathematics 7 and 9 advised.

17. THERMOMETRY OF HIGH AND LOW TEMPERATURES.—Primarily a laboratory course, but with frequent recitations on the theory of the measurement of extreme temperatures. *Le Chatelier's High Temperature Measurements. II.*; *arrange time*; (*2*). Professor CARMAN, Assistant Professors KNIPP and WATSON.

Required: 16a and 16b.

18. TEACHERS' PREPARATORY COURSE.—Practical work for students preparing to teach physics. The course includes discussions of text-books, laboratory manuals, apparatus, catalogs, and methods of conducting work in physics; manipulation in blowing, bending and cutting glass, in soldering metals, and in managing a lecture lantern, etc.; and advanced work in laboratory physics. *I., II.*; *arrange time*; (*2*) Professor CARMAN and Assistant Professor WATSON.

Primarily for juniors and seniors.

Required: Physics 1 and 3, or 2a and 2b.

19a. MECHANICS AND GENERAL PROPERTIES OF MATTER.—An elementary consideration of kinematics, dynamics, statics, work and energy, together with gravitation attraction and potential. *I.*; *M., W., F.*; *2*; (*3*). Assistant Professor KNIPP.

Required: Physics 1 and 3, or 2a and 2b; Mathematics 7 and 9, or 8a desired.

19b. MECHANICS.—A course in exact measurement of mass, length, volume, density, time, and gravity, using balance, dividing engine, cathetometer, chronograph, etc. *I. or II.*; *arrange time*; (*2, 3 or 5*). Assistant Professor KNIPP.

Required: Physics 1 and 3, or 2a and 2b; 19a desired.

20a. LIGHT.—*Preston's Light*. Recitations and seminary. In the seminary the members of the class take turns in giving experimental demonstrations of the more elementary phenomena discussed in the text. *II.*; *Tu., Th.*; *arrange time*; *F*; 9; (3). Assistant Professor KNIPP.

Required: Mathematics 7 and 9, or 8a; Physics 19a desired.

20b. LIGHT.—Measurement of indices of refraction and wave lengths, using the spectrometer with prisms and grating, the concave grating with its mounting; also the use of the optical bench in experiments in interference; photometric measurements and the use of the spectrum-photometer. *I. or II.*; *arrange time*; (2, 3, or 5). Assistant Professor KNIPP.

Required: Physics 1 and 3, or 2a and 2b; 20a desired.

21. RECENT ADVANCES IN PHYSICAL SCIENCE.—Lectures illustrated by experiments. This course is primarily for students whose major is physics; however, it is open to advanced science and engineering students interested in physical phenomena. The subjects discussed vary from year to year. In 1905-6 the subject will be radiation. *I.*; 9; (1). Assistant Professor KNIPP.

22. PHYSICAL PROBLEMS.—The application of mathematics to the solution of physical problems in mechanics, heat, electricity, magnetism, sound, and light. *II.*; *arrange time*; (2). Assistant Professor KNIPP.

Required: Physics 1 and 3, or 2a and 2b; Mathematics 7 and 9.

23. LABORATORY PRACTICE IN PHOTOMETRY.—Study of photometric methods, quantitative study of artificial light sources. *I.*; *arrange time*; 6-8; (2). Assistant Professor KNIPP.

Required: Physics 4a and 4b.

30a. ELECTRICITY AND MAGNETISM.—Elementary mathematical theory. *II.*; *W., F.*; (3). Assistant Professor KNIPP.

Required: Physics 20a, 4a; Mathematics 7 and 9, or 8a.

30b. ELECTRICITY AND MAGNETISM.—A course of electrical measurements, including experimental work in some of the more recent developments, such as electric waves and their application to wireless telegraphy, electrical discharge in gases, etc. *I. or II.*; *arrange time*; (2, 3 or 5). Assistant Professor KNIPP.

Required: Physics 4a, 30a desired.

31. INVESTIGATION OF SPECIAL PROBLEMS.—An advanced course

in the laboratory or in design and calculation, in continuation of Physics 4, 16, 19, 20, or 30. A special topic is assigned and worked out with the advice and direction of the professor. The repeating of some classic investigation may be assigned. Among the recent problems were the following designs of pieces of apparatus which were also constructed and calibrated in the department: An inductance without iron, variable continuously from zero to 1.2 henry; an inductor dynamo machine giving a sine wave; an exact potentiometer to measure to 150 volts and also to 150 amperes; two testing tables for standardizing ammeters and voltmeters. *I., II.; arrange time; (3) or (5).* Professor CARMAN, Assistant Professors KNIPP and WATSON.

Required: One semester of Physics in advance of Physics 1 and 2.

32. MATHEMATICAL PHYSICS.—Lectures and recitations on special topics in theoretical physics. *I., II.; arrange time; (3).* Professor CARMAN.

Required: Physics 19.

33. INVESTIGATION AND THESIS.—*I., II.; arrange time; (3) or (5).* Professor CARMAN, Assistant Professors KNIPP and WATSON.

COURSES FOR GRADUATES

Courses 4, and 16-33. These courses, open to advanced undergraduates, are arranged with additions for graduates credit.

101. Advanced Physical Measurements and Investigation.

102. Mathematical Physics.

103. Mathematical Theory of Electricity and Magnetism for Engineers.

PHYSIOLOGY

Professor KEMP, Mr. HAYHURST

1. MAJOR COURSE.—The work begins with a comprehensive study of the microscopic structure of the tissues in general, and later includes the structure of the organs in particular, with special relation to their functions. The course, together with courses in chemistry recommended for prospective medical students, will complete a thorough study of physiological chemistry, so far as it relates to the normal composition and functions of the organs and excretions. Frequent demonstrations in experimental physiology

are given before the class, and the student is required to perform a number of such experiments under the immediate direction of the instructor. In addition, the students, working in small groups, perform assigned experiments. *I., II.; daily; 3, 4; (5).* Professor KEMP and Mr. HAYHURST.

Required: Physics 1, 3; Chemistry 1, 2, 3a, 5a, 9, 9c; Zoölogy 2.

2. **ADVANCED COURSE.**—Continuation of Physiology 1 through a second year. This course is designed for students who wish to get as thorough a training as possible for the study of medicine, and who can afford to take the full science course at the University leading to the B.A. degree. Lectures, assigned reading, and experiments in the laboratory conducted by the students under the supervision of the instructor. In exceptional cases, this course may be taken along with Physiology 1, by special arrangement with Professor Kemp. *I., II.; daily; 3, 4; (5).* Professor KEMP and Mr. HAYHURST.

3. **INVESTIGATION AND THESIS.**—Every facility and encouragement, so far as the resources of the laboratory permit, are offered to those prepared to avail themselves of these for researches leading to theses for the bachelor's, master's or doctor's degree, or for carrying on original work for publication.

4. **MINOR COURSE.**—Especial emphasis is laid upon those facts that serve as a basis for practical hygiene, and for helping students to teach physiology in high schools. Lecture demonstrations, recitations, and laboratory work. Students who have had chemistry and zoölogy in high schools may be admitted to the course at the option of the instructor. *II.; daily; 7, 8; (5).* Professor KEMP and Mr. HAYHURST.

Required: Chemistry 1; Zoölogy 10.

5. **SPECIAL PHYSIOLOGY.**—There are here included the following lines of laboratory work, any one or more of which may be pursued independently of the others: (a) The physiology of foods, and digestion; (b) the blood, circulation, and respiration; (c) the excretions, especially urine analysis; (d) general physiology of nerve and muscle; (e) advanced vertebrate, especially human, histology; (f) special work with simple apparatus to train the student in methods of demonstration for prospective high-school teachers. This course may be taken after physiology 4, and is recommended for those who wish to work a year in physiology without having the requirements to enter the class in physiology 1. It may also

be taken for less than five credits. Work to be arranged after consultation with Professor Kemp and Mr. Hayhurst.

6. **HYGIENE.**—This course must be taken by young women who take physical training for credit. The course deals with those practical hygienic problems of everyday life that are wholly or in large part under the control of each individual. *I.; M.; 9; (1).* Professor KEMP and Mrs. LINCOLN.

POLITICAL SCIENCE

Assistant Professor GARNER

1. **AMERICAN GOVERNMENT.**—An introductory course to the study of national and state government in the United States, particular emphasis being given to historical development, organization, powers, limitations and practical working. *I.; M., W., F.; 1; (3).* Assistant Professor GARNER.

Required: At least 30 hours of University work.

2. **COMPARATIVE POLITICS.**—A comparative study of the national political systems of the United States, Great Britain, France, Germany and Switzerland, with special reference to constitutional beginnings, political organization, methods of legislation and administration, and constitutional guarantees for the protection of individual rights. Open to seniors and graduate students who have had course 1, or its equivalent. *II.; M., W., F.; 1; (3).* Assistant Professor GARNER.

3. **COMPARATIVE STATE CONSTITUTIONS.**—A study of the evolution of the American state constitution from the colonial charter; powers, rights and obligations of states under the Federal Constitution; methods of formation and of admission to the Union; comparative study of the organization of commonwealth government; constitutional resemblances and diversities. *II.; Tu., Th.; 2; (2).* Assistant Professor GARNER.

Required: Political Science 1.

4. **MUNICIPAL GOVERNMENT.**—A study of the organization and administration of city government in the United States and in Europe. Emphasis is given to the causes which have led to the phenomenal growth of cities; powers and liabilities of municipal corporations; and the problem of governing the modern municipality, such, for example, as those relating to urban transportation, police, light and water supply, charities, education, municipal owner-

ship of public utilities, etc. Lectures, assigned readings and reports. *I.; Tu., Th.; 2; (2)*. Assistant Professor GARNER.

5. FEDERAL AND STATE ADMINISTRATION.—A survey of federal and state administrative activities. The organization and work of the nine executive departments and of the various commissions and agencies of the national government; the state administrative departments of education, health, insurance, mines, factories, etc.; and the administrative law governing official relations. *II.; Tu., Th.; 1; (2)*. Assistant Professor GARNER.

Required: Political Science 1.

6. INTERNATIONAL LAW.—The development of the law of nations; its nature, source and present status; the equality of states; the doctrine of intervention; the law of war and peace; the rights and duties of neutrals; the arbitration movement. Lectures, recitations, assigned readings and reports. Open to juniors and seniors. Others who are qualified may be admitted by special permission. *I.; M., W., F.; 2; (3)*. Assistant Professor GARNER.

7. AMERICAN DIPLOMACY.—A study of the genesis and present organization of the Department of State; the diplomatic service; the treaty making power; the methods and traditional principles of the foreign policy of the United States; historical review of the principal diplomatic controversies between the United States and foreign powers from the foundation of the government to the present time; and the elevation of the United States to the position of a world power. *II.; M., W., F.; 2; (3)*. Assistant Professor GARNER.

Required: Political Science 6.

8. GOVERNMENT AND INSTITUTIONS OF ILLINOIS.—A study of the organization and administration of civil government, central and local, in Illinois. This course may be combined advantageously with history 17. *I.; Tu., Th.; 1; (2)*. Assistant Professor GARNER.

9. SEMINARY IN CITIZENSHIP.—A study of the constitutional and legal aspects of citizenship. Distinction between federal and state citizenship; how acquired and how forfeited; rights, privileges and obligations of citizens under the constitution. Assigned topics and reports. For advanced students only. *I.; (1); arrange time*. Assistant Professor GARNER.

10. SEMINARY IN CIVIL RIGHTS.—A study of the personal and property rights of the individual under the Federal Constitution; the nature and content of civil liberty; and the extent to which

it is protected in the United States from governmental encroachment. Assigned topics and reports. For advanced students only. *II.; (1); arrange time.* Assistant Professor GARNER.

PSYCHOLOGY

Associate Professor COLVIN

1. **ELEMENTARY PSYCHOLOGY.**—This course is intended for beginners in psychology. James' Psychology is used as a text. *I.; M., W., F.; 2; (3).* Associate Professor COLVIN.

Required: At least one year of University work.

2. **INTRODUCTION TO PSYCHOLOGY.**—The object of this course is to give the student a complete though tentative system of psychology based upon the results of experimental investigation. *II.; M., W., F.; 2; (3).* Associate Professor COLVIN.

Required: At least one year of University work.

3. **EXPERIMENTAL PSYCHOLOGY.**—The object of this course is to train the student in laboratory methods and give him an acquaintance with normal psychical phenomena. *I.; Lectures, M., W.; arrange time for laboratory; (5).* Associate Professor COLVIN.

Required: Psychology 1 or 2, and a familiarity with laboratory method, gained through a laboratory course in some other department.

4. **EXPERIMENTAL PSYCHOLOGY.**—This is a continuation of course 3. The laboratory method is continued in the study of the higher psychic activities. *II.; Lectures, M., W.; 4; arrange time for laboratory; (5).* Associate Professor COLVIN.

Required: Same as Psychology 3.

5. **GENETIC PSYCHOLOGY.**—The more substantial results of child study serve as a basis for the first part of the course, while the latter part is devoted to the phenomena of adolescence, and the intellectual problems confronting the youth. The development of the nervous system and growth of the body are traced in connection with the mental development. *I.; Tu., Th.; 3; (2).* Associate Professor COLVIN.

Required: Two years of University work.

6. **COMPARATIVE PSYCHOLOGY.**—It is the aim of this course to trace the evolution of intelligence in connection with that of the nervous system from the lowest forms of animal life to that of man. The psychology of the higher vertebrates will be particularly studied

and compared with that of the child and of the adult. *I.; Tu., Th.; 2; (2).* Associate Professor COLVIN.

Required: Psychology 1 or 2.

8. THE PSYCHOLOGY OF THE EMOTIONS AND THE WILL.—This course considers critically the principal phenomena of volition and feeling as distinguished from those of the intellect. Illustrations will be taken largely from biography, history, and literature. *II.; Tu., Th.; 2; (2).* Associate Professor COLVIN.

Required: Psychology 1 or 2.

COURSES FOR GRADUATES

101. ORIGINAL RESEARCH.—Opportunity to investigate advanced problems in experimental psychology, and in comparative and genetic psychology is offered to those properly qualified. *I., II.; arrange time.* Associate Professor COLVIN.

102. JOURNAL CLUB.—This course considers the most important problems of contemporary psychology as they are presented in current psychological and philosophical journals. The seminary method is used. Although intended for graduates, the course under certain conditions may be elected by seniors. *I., II.; arrange time; (2).* Associate Professor COLVIN.

RAILWAY ENGINEERING

[For instructors see Mechanical Engineering.]

1. LOCOMOTIVE ENGINES.—This work is a study of the constructive features of the locomotive in all its parts and of their relations. The development, applications, and limitations of the various types and their special study with reference to the relations between boiler and cylinder capacity, weight on drivers, speed, hauling capacity, etc. Tendencies in design. Includes also a study of all accessory apparatus used in the operation of locomotives. *I.; Tu., Th.; 3; (2).* Mr. SNODGRASS.

Required: Theoretical and Applied Mechanics 1; Physics 1, 3; Mechanical Engineering 7.

2. LOCOMOTIVE ENGINE DESIGN.—The proportions and dimensions of standard locomotives are studied. Calculations and designs relating to boiler and engine details, cylinder proportions for compound types of slide valves, and valve gears. *I.; M., W., F.; 2, 3, 4; (3).* Assistant Professor LEUTWILER.

Required: Mechanical Engineering 1 to 7, 23, 24; Theoretical and Applied Mechanics 1, 2.

3. SHOP SYSTEMS.—Lectures and readings. Visits of inspection. A study of the proceedings of the societies and railway clubs and the technical press. *I.; W.; 6, 7, 8; (1).* Mr. SNODGRASS.

4. LOCOMOTIVE ROAD TESTS.—Arrangements for locomotive road tests have been perfected with several roads entering Champaign and Urbana. Already five locomotives have been equipped for this work and tests made in actual service conditions. This work is greatly facilitated by the use of the dynamometer and railway test cars which are now at the service of the department. This course includes also brake tests and other laboratory work. *I.; M., F.; 6, 7, 8; S.; 2, 3, 4; (3).* Mr. SNODGRASS.

Required: Theoretical and Applied Mechanics 3; Mechanical Engineering 1 to 7, 14.

5. COMPRESSED AIR IN RAILWAY SERVICE.—This will include a careful study of the construction and operation of the air-brake system in detail. The air-brake instruction cars of the I. C. R. R. and the C. C. C. & St. L. Ry., make frequent stops at these points, and the instructors in charge kindly devote sufficient time to illustrate and explain the operation of the air-brake. The use of compressed air in shop service is also studied. *II.; Tu., 1; (1).* Mr. SNODGRASS.

Required: Mechanical Engineering 7.

6. RAILWAY ESTIMATES.—A study of costs of materials and repairs. Forms of specifications for supplies. Costs of operation and maintenance of foreign and American practice compared. *II.; Tu.; 2, 3; (1).* Professor BRECKENRIDGE.

Required: Railway Engineering 1 to 4.

7. ADVANCED DESIGNING.—Under this head attention will be paid to details of rolling stock, pumps, gas and oil engines for water supply. Special machinery for repair shop service, turntables, and advanced problems relating to locomotive design. *II.; M., W., F.; 2, 3, 4; (3).* Assistant Professor LEUTWILER.

Required: Theoretical and Applied Mechanics 1, 2, 3; Railway Engineering 1, 4.

8. DYNAMOMETER CAR TESTS.—Investigations will be made under actual road conditions relating to hauling capacity of engines, train resistance due to acceleration, grades, curves, and wind pressure. Air-brake service inspections. Automatic records of track conditions as to gauge, surface, joints, and elevation of rails. Tests at stationary plants and railway shops will be made.

Arrangements for careful and scientific sampling of fuels, boiler waters, oils, paints, varnishes, and railway supplies for analysis and tests will be included in this work. *II.; M.; 6, 7, 8; (1).* Mr. SNODGRASS.

Required: Railway Engineering 4.

9. LOCOMOTIVES AND STEAM RAILWAYS, ELECTRIC RAILWAYS.—General treatment, giving peculiar adaptations and limitations of steam and electric roads; their adoption as determined by character of country or service and distance. Probable future changes in the latter; essential differences in operation. *II.; Tu., Th.; (6).* Mr. SNODGRASS.

RHETORIC AND ORATORY

Professor CLARK, Associate Professor FULTON, Miss KYLE, Mr. ADAMS, Mr. GUILD, Miss PITTS, Mr. ENO

1. RHETORIC AND THEMES.—Required for students in the College of Literature and Arts, Agriculture, Science, and Engineering. Students who, by their written work and by passing a satisfactory examination in the principles of rhetoric, give evidence of exceptionally good preparation may, however, be excused from this course and allowed to take course 15 instead *I., II.; M., W., F.; section A, 1; section B, 2; section C, 3; section D, 4; section E, 6; section F, 7; section G, 8; (3).* Professor CLARK, Associate Professor FULTON, and assistants.

3. DAILY THEMES.—*Bates's Talks on Writing English, first and second series. I., II.; M., W., F.; section A, 3; section B, 4; (4).* Miss KYLE.

Required: Rhetoric and Oratory 1.

4. THE ART OF DEBATE.—The study and application of the principles underlying debating. *I.; M., W., F.; 8; (3).* Mr. ADAMS.

Required: Rhetoric and Oratory 1 and 7.

5. EXTEMPORE SPEAKING.—*I., II.; Th.; 8; (1).* Mr. ADAMS.

Required: Rhetoric and Oratory 1 and 7.

6a. ENGLISH COMPOSITION (Advanced Course).—*Bates's Talks on Writing English. I.; Tu., Th.; 3; (3).* Associate Professor FULTON.

Required: Rhetoric and Oratory 1.

6b. ENGLISH COMPOSITION AND LITERATURE.—The study of rhetorical principles, as seen in literary masterpieces. In 1905-1906

the essays of Carlyle, Macaulay, DeQuincey, Stevenson, and others, will be studied and analyzed; in 1906-1907 the essays of Lamb, Newman, Arnold, Pater, and others. Two three-page themes a week and two long exercises a semester. Students may elect this course in two successive years and receive credit for it twice. *II.; Tu., Th.; 3; (3)*. Associate Professor FULTON.

Required: Rhetoric and Oratory 1 and 3.

7. PUBLIC SPEAKING.—An introductory course in public speaking—vocal, breathing, action and declamation exercises supplemented by text-book and individual instruction. May be begun either semester. *I.; section A, M., W.; 7; section B., Tu., Th.; 7; (for beginners): section C, Tu, Th.; 6; (for students having had one semester's work in the subject). II.; section A, M., W.; 7; section B., Tu., Th.; 7; (for students having had one semester's work in the subject); section C, Tu., Th.; 6; (for beginners); (2)*. Mr. ADAMS.

8. SEMINARY.—Methods of teaching English composition. Open to senior and graduate students. *I. or II.; W.; arrange time. (1)*. Associate Professor FULTON.

9. DRAMATIC READING.—Critical study and presentation of two of Shakespeare's plays. Selection is made from the following plays: Macbeth, Othello, Julius Cæsar, Hamlet, Merchant of Venice, Much Ado About Nothing, and As You Like It. *I.; Tu., Th.; 2; (2)*. Mr. ADAMS.

Required: Rhetoric and Oratory 7.

10. BUSINESS WRITING.—Business Correspondence, the making of summaries and abstracts, advertising, proof reading, and the preparation of manuscript for the press. (Open only to students in business courses.) *I., II.; Tu., Th.; 4; (2)*. Mr. GUILD.

Required: Rhetoric and Oratory 1.

11. COMPOSITION AND LITERATURE.—For students in the College of Engineering who elect English as their language. The course will be about equally divided between composition and English prose literature. *II.; M., W., F., 2; (3)*. Mr. ENO.

12. NEWSPAPER WRITING.—Problems in reportorial and editorial work, with weekly assignments on actual cases. Lectures, with class discussions, on newspaper ethics, responsibility, aims, and policy; with reference to past development and present tendencies. *I., II.; Tu., Th.; 3 (2)*. Mr. ENO.

13. PRACTICE IN DEBATING.—Students who have shown proficiency in debating, and who wish to take part in any of the inter-

collegiate debates should register in this course if they wish to receive credit for their work. *I. or II.; three meetings a week; arrange time; (1 to 2).* Mr. ADAMS.

14 ORATORICAL COMPOSITION AND DELIVERY.—The leading English and American orations are read and criticized. Students write and deliver two orations. Lectures and supplementary reading. *II.; M., W., F.; 8; (3).* Mr. ADAMS.

Required: Rhetoric and Oratory 1 and 7.

15. RHETORIC AND THEMES.—Required of all students in the Colleges of Literature and Arts, Agriculture, Science, and Engineering who are excused from taking Course 1. *I.; M., W., F.; 8; (3).* Mr. GUILD, Mr. ENO.

16. EXPOSITION.—Study of the principles underlying the expository method; analysis of masterpieces of exposition, both literary and scientific; themes. *I.; Tu., Th.; 4; (3).* Associate Professor FULTON.

17. PRINCIPLES OF CRITICISM.—A study of the principles underlying the art of criticism; reports and essays; Winchester's *Principles of Literary Criticism*. Open to juniors, seniors, and graduates. *I.; Tu., Th.; 2; (2).* Associate Professor FULTON.

18. THE ART OF CRITICISM.—Critical essays based upon a study of selected prose masterpieces, especially in criticism. The essays of Lamb, Newman, Arnold, Pater, and others will be studied in 1906-07. Students who expect to take this course are advised to take course 17 in advance. This course may be elected and counted for credit in two successive years. Open to juniors, seniors, and graduates. *II.; Tu., Th.; 2; (3).* Associate Professor FULTON.

SOCIOLOGY

See Economics 15, 17, English 19, Anthropology 1, 2.

SPANISH

Professor OLIVER

1. ELEMENTARY COURSE.—Spanish grammar and reading. Composition. *I., II.; M., W., F.; 2; (3).* Professor OLIVER.

THEORETICAL AND APPLIED MECHANICS

See Mechanics (p. 277).

THREMMATOLOGY¹

Professor DAVENPORT.

1. APPLIED EVOLUTION.—The principles of evolution as applied to the improvement of domesticated animals and plants. Variation, its extent and causes. Selection and its effect in changing type, as illustrated both in nature and in domestication. The nature of heredity and the manner of its operation under the influence of environment. Reflex action, habit, and instinct, as bearing upon the question of inheritance of acquired characters. The origin, correlation, and disappearance of characters. The laws of frequency and regression as bearing upon achievements that may be confidently expected. *II.; daily; 4; (5).* Professor DAVENPORT.

Required: Two years of University work.

2. INVESTIGATION AND THESIS.—*I., or II.; (5).* Professor DAVENPORT.

VETERINARY SCIENCE

Professor McINTOSH

2. VETERINARY MATERIA MEDICA.—This subject, which treats of the agents for the cure of disease or injury, and for the preservation of health among domestic animals, is taught by lectures and text-books, illustrated by specimens of the drugs used in veterinary practice. The compounding of medicines also receives attention. Text-book, *Finlay Dun's Veterinary Materia Medica. I., II.; daily; 3; (5).* Professor McINTOSH.

4. ANATOMY, PHYSIOLOGY AND DISEASES OF THE DOMESTIC ANIMALS.—The subjects taught during the second semester are the outlines of veterinary anatomy, physiology and diseases of the digestive organs, respiratory organs, the organs of circulation, the lymphatic system, the urinary organs, the skin, tumors and the nervous system. *I.; daily; section A, 2; section B, 4; (5).*

5. ANATOMY, PHYSIOLOGY AND DISEASES OF THE DOMESTIC ANIMAL.—The subjects taught during the second semester are the anatomy, physiology and diseases of the bones and joints, feet, wounds, eye, and generative system. Epizootic and contagious diseases, catarrhal fevers, pyemia, septicemia, rheumatism, tuberculosis, fistula, poll-evil and the internal parasites of the domestic animals. *II., daily; section A, 2; section B, 4; (5).*

¹After the present year this study will be restored to the former time, I, 4, daily.

ZOOLOGY¹

Professor FORBES, Assistant Professor SMITH, Dr. PETERS, Dr. CARPENTER

1a. GENERAL ZOÖLOGY.—A composite, elementary course in both vertebrate and invertebrate zoölogy, including a study of the classification, morphology, physiology, and natural history of a series of animals selected with special reference to the zoölogy of Illinois. Includes observational and experimental studies in field and in laboratory, and lectures on general and theoretical zoology. This course is offered primarily to general science students and to those preparing to teach. *I., II.; lecture, M., W.; 4; laboratory 6 periods; 3 and 4; (4).* Professor FORBES, Assistant Professor SMITH, and Dr. PETERS.

Required: An entrance credit in chemistry or Chemistry 1; Art and Design 1. The chemistry and art and design may be taken parallel with the first semester of this course.

1b. TEACHERS' COURSE IN ZOÖLOGY.—The same as 1a with the addition of lectures, field and laboratory studies, special readings, quizzes, and discussions on the special pedagogy of zoölogy. *I., II.; daily; 3 and 4; (5).* Professor FORBES, Assistant Professor SMITH, and Dr. PETERS.

Required: The same as for 1a.

2. VERTEBRATE ZOÖLOGY AND COMPARATIVE ANATOMY.—In the laboratory work of this course principal attention will be given to the anatomy of Necturus and to anatomical and systematic studies of fishes, birds, and mammals. The course will contain lectures on the general theory of evolution with more attention to the evidences furnished by the anatomy and embryology of the vertebrates and especially of man. The ordinary technique of section cutting and staining will be included in the course. *II.; lecture, M., W., F.; 2; laboratory, 7 periods; 1, 2; (5).* Assistant Professor SMITH and Dr. CARPENTER.

Required: Art and Design 1; an entrance credit in chemistry or Chemistry 1; Zoölogy 10.

3. VERTEBRATE EMBRYOLOGY.—This course begins with a study of the sex cells and a discussion of theories of heredity, followed by a consideration of the early stages in the development of the egg. The formation of the vertebrate body is then studied in the amphibian, the chick, and the pig. Instruction is given in the prep-

¹See also courses under Entomology.

aration of embryological material and in graphic reconstruction from serial sections. *I., II.; M., W., F.; 3, 4; (3).* Dr. CARPENTER.

Required: Zoölogy 1a or 2.

8. THESIS INVESTIGATION.—Candidates for graduation who select a zoölogical subject as a thesis are required to spend three hours a day during their senior year in making a detailed investigation of the selected subjects. While this work is done under the general supervision of an instructor, it is in its methods and responsibilities essentially original work. *I., II.; arrange time; (5).* Professor FORBES, Assistant Professor SMITH, and Dr. PETERS.

Required: Two years in zoölogical courses.

10. INTRODUCTORY ZOÖLOGY.—This is a laboratory and lecture course, mainly on the morphology, physiology, and ecology of type forms, and on the more important features of cytology and development. The work leads to an acquaintance with the simpler generalizations of zoölogical theory, and is intended especially as a preparation for course 2. Students who present an entrance credit in zoölogy or biology may take as a fractional course those parts of this work not covered in their previous study. *I.; lecture, M., W., F.; 2; laboratory, 7 periods; 1, 2 or 6, 7; (5); or II.; , 6 7; (5).* Assistant Professor SMITH, Dr. PETERS, and Dr. CARPENTER.

12. STATISTICAL ZOÖLOGY.—This course is offered for students taking Mathematics 26. It includes lectures and reference reading on the application of statistical methods to biological problems. The history of the development of this mode of biological investigation, the nature of the problems to which it is applicable and some of the results already obtained in the study of variations, heredity, distribution and phylogeny are among the topics considered. Students taking this course, together with Mathematics 26b, ordinarily use for the problems of the latter course, zoölogical data that have been obtained either by their own observations or from other sources. If desired the combined credits of this course and Mathematics 26 may be counted as 5 credits either in zoölogy or in mathematics. *II.; Tu.; 2; (1 or 5).* Assistant Professor SMITH.

Required: Mathematics 2, 4, 6, 8a, and at least ten hours of University work in Zoölogy, or in Zoölogy and Entomology.

14. GERMAN READINGS.—A study of zoölogical literature in German intended to give technical information and practice in accurate and rapid reading. This course, together with botany 13, will be accepted instead of German 6 of the prescribed list of all

except students in chemistry and chemical engineering. *II.; arrange time; (4).* Assistant Professor HOTTES.

Required: German 4.

15. VARIATION AND HEREDITY.—A course of lectures and reference reading designed to give a general survey of the results obtained by the application of modern statistical methods in the study of variation and heredity. A knowledge of the methods is acquired from lectures and from exercises in handling data gathered from various sources. Mendel's principles and the theory of mutations are discussed. For accompanying laboratory work see 5a. *II.; arrange time; (2).* Assistant Professor SMITH.

Required: Zoölogy 10 or 1a.

15a. STATISTICAL DATA.—Laboratory work involving the collection of data suitable for a study of the variations and correlations of structures in some suitable organism may be elected in connection with course 5. The extensive collections of insects, fishes and plankton material in the possession of the State Laboratory of Natural History are available for the purpose of this course. *II.; arrange time; (1 to 3).* Assistant Professor SMITH.

Required: Zoölogy 10 or 1a.

16. EXPERIMENTAL AND PHYSIOLOGICAL ZOÖLOGY. — General physiological and morphological processes will be studied from the standpoint of the cell as seen in its growth, division, differentiation, and movements. The external factors to be considered will include water, salts, certain gases, mechanical agents, gravity, heat, light, electricity, and special attention will be given to osmotic pressure and ion physiology. The internal processes of the cell will be analyzed, when possible, into physical and chemical elements. In experimental morphology attention will be given to artificial fertilization, parthenogenesis, and the development of eggs and embryos under experimental conditions.

The laboratory exercises will consist first, in the repetition of well-established experiments, and secondly, in work on special problems. It is intended to give a training in the experimental method for advanced students, teachers, and prospective investigators. Problems for investigation will be indicated which may be undertaken by any who are competent. The objects receiving chief attention will be invertebrates and free-living cells. *I., II.; arrange time; (2).* Dr. PETERS.

Required: Zoölogy 10 or 1a and Chemistry 1 or its equivalent.

17a. FIELD ZOÖLOGY.—A course in which the main object will be to gain as comprehensive a knowledge as practicable of the animal life of a restricted locality. Collection, preservation, and identification of various kinds of animals, together with observations of the habits, life histories, and relations to environment of selected forms, will constitute the major part of the work. The phases of the subject receiving most attention will vary with the make-up of the class and with the kind of locality selected, but in any event the work will be so planned as to make it a desirable course for prospective teachers of zoölogy. *I; arrange time; (3).* Assistant Professor SMITH.

Required: Zoölogy 10 or 1a.

17b. FIELD ORNITHOLOGY.—A course especially designed to give an acquaintance with the birds of the vicinity. Identification, food relations, seasonal distribution, and migration activities receive chief attention. Students are expected to provide themselves with opera or field-glasses. *II.; arrange time; (2).* Assistant Professor SMITH

Required: Zoölogy 10 or 1a.

COURSES FOR GRADUATES

Zoology 2,¹ 8, 12, 15, 16, and 17 may be taken for under-graduate or graduate credit; and the following for graduate credit only:

101. PLANKTON ZOÖLOGY.—Instruction and practice will be given in modern methods of studying minute forms of aquatic life with the aid of a plankton apparatus and laboratory equipment. This work includes both a qualitative and quantitative investigation of the minute zoölogical contents of a selected body of water, carried on systematically through a considerable period, and the generalization of the results of such study by the methods peculiar to the planktologist.

102. FRESH-WATER ICHTHYOLOGY.—The large collections of fishes belonging to the University and the State Laboratory of Natural History, together with the ichthyological library of the latter, are open to students who wish to become acquainted with the ichthyology of a fresh-water situation. Both qualitative and quantitative studies of the fishes of a selected body of water are made, and papers written presenting the results of personal studies in this field.

¹Open as a graduate course only to those who have had zoology 1a or its equivalent.

103. FRESH-WATER AND TERRESTRIAL ANNELIDS.—This is an application of the methods of the zoölogical laboratory to the study of the annelid worms of the land and the inland waters of North America. The description of genera and species, practice in drawing for publication, and experimental work on the physiology and ecology of selected forms will be included

104. PHYSIOLOGICAL ZOÖLOGY.—In this course the student will be taught the principles and practice involved in the application of physical and chemical methods to physiological experimentation upon animals. Selected portions of the literature of experimental and physiological zoölogy will be read and discussed. The laboratory work will consist of exercises that illustrate advanced methods, or, of a problem using such methods. The latter may constitute a thesis. *I., II.; arrange time.* Dr. PETERS.

GRADUATION AND DEGREES

GRADUATION

The candidate for a degree must complete all the subjects prescribed for graduation in his course, and when, in doing this, he does not gain the necessary credit of one hundred and thirty hours, he must make up the deficiency by electing other subjects. (See p. 184).

The combinations of studies under which a student may graduate are too numerous to describe; they are given to some extent under the separate colleges and schools.

Examinations are held as often as in the judgment of the instructor the necessities of the work require. Examinations are also given at the close of each semester, on the work of the semester, in all subjects except those whose character renders it unnecessary or impracticable.

BACHELORS' DEGREES

The usual bachelors' degrees are conferred upon those who satisfactorily complete the courses of study described under the different colleges and schools. A candidate for a bachelor's degree must pass in the subjects marked *prescribed* in his chosen course, and must conform to the directions given in connection with that course in regard to electives. In the College of Literature and Arts, of Science and of Agriculture, credit for 130 hours is required for graduation. In the College of Engineering, in the College of Law, and in the Schools of Music and Library Science the candi-

date must complete the course of study as laid down. The number of hours required includes five in military drill and tactics and two in physical training for men, and three in physical training for women. Men excused from the military requirements, and women who do not take courses in physical training, must elect in lieu thereof an equivalent number of hours in other subjects.

In all cases in which a thesis is required,¹ the subject must be announced not later than the first Monday in November, and the completed thesis must be submitted to the dean of the proper college by June 1st. The work must be done under the direction of the professor in whose department the subject belongs, and must be in the line of the course of study for which a degree is expected. The thesis must be presented upon regulation paper, and is deposited in the library of the University.

1. The degree of Bachelor of Arts is conferred on those who complete a course in the College of Literature and Arts, or of Science.

2. The degree of Bachelor of Science is conferred on those who complete a course in the College of Engineering, or of Agriculture. This degree may be conferred on a graduate of the College of Science on recommendation of the Faculty, as announced on p. III.

3. The degree of Bachelor of Laws is conferred on those who complete the course in the College of Law.

4. The degree of Doctor of Medicine is conferred on those who complete the course in the College of Medicine,

5. The degree of Bachelor of Library Science is conferred on those who complete the course in the School of Library Science.

6. The degree of Bachelor of Music is conferred on those who complete one of the courses in the School of Music.

7. The degree of Graduate in Pharmacy is conferred

¹See requirements for graduation in the different colleges.

on those who complete the course in the School of Pharmacy.

8. The degree of Doctor of Dental Surgery is conferred on those who complete the course in the College of Dentistry.

ADVANCED DEGREES

No degrees are given for study *in absentia*, except that graduates of this University, who become members of the Graduate School and reside elsewhere, may receive a master's degree upon the completion of their course of study within not less than three years of the date of registration. Advanced degrees are conferred by the Trustees of the University only upon recommendation of the Senate, based upon information furnished by the Council of Administration.

SECOND DEGREES

The second degrees conferred by this University are as follows:

Master of Arts after Bachelor of Arts.

Master of Science after Bachelor of Science in courses in the colleges of Agriculture and Science.

Master of Architecture after Bachelor of Science in courses of Architecture and Architectural Engineering.

Civil Engineer after Bachelor of Science in the course of Civil Engineering.

Electrical Engineer after Bachelor of Science in the course in Electrical Engineering.

Mechanical Engineer after Bachelor of Science in the course in Mechanical Engineering.

Pharmaceutical Chemist after Graduate in Pharmacy.

Graduates of other colleges and universities which have equivalent requirements for baccalaureate degrees may be given second degrees determined in kind by comparison with the usage described above.

All candidates for second degrees are required to regis-

ter in the Graduate School, to conform to the conditions outlined under "Admission and Registration," and "Studies and Examinations" (pp. 73 and 309); to pursue an approved course of study for one academic year in residence, or, in the case of graduates of this University, for three years *in absentia*; and to pass satisfactory examinations upon all the studies of the approved course.

Each candidate for a second degree must present an acceptable thesis in the line of his major subject of study. The subject of this thesis must be announced to the Dean of the Graduate School not later than the first Monday in November of the academic year in which the course is to be completed. The completed thesis, upon regulation paper, must be presented, with the certified approval of the professor in charge, to the Council of Administration not later than June 1st.

The period of required study begins from the date of registration in the Graduate School.

DOCTOR'S DEGREE

The Degree of Doctor of Philosophy may be conferred upon any member of the Graduate School who shall have reached high attainments in scholarship, including a sufficient knowledge of the French and German languages to serve the purposes of research in his principal specialty, who shall have shown marked ability in some line of literary or scientific investigation, and shall have presented a thesis giving clear indications of such scholarship and of such power of research. At least the first two, or the last one, of three years of graduate study must be in residence at this University, and the entire course of study must be in accordance with the regulations of the Graduate School.

The time and study required for a master's degree may be included in the three years required, but approval of a course of study for a doctor's degree must be upon the condition that the candidate is prepared through his baccalaureate work, or otherwise, to enter at the beginning of the

period upon advanced studies in the line of his major subject, and that work on this major subject be continued through the three years.

The final examination of a candidate for the doctor's degree is conducted by a committee consisting of the head of the department under which the major subject has been pursued, as chairman, and of not less than two additional members of the Senate of the University, appointed for the purpose by the Council of Administration. This examination covers the subject of the course approved for the degree, but is especially searching upon that on which the major work has been done.

Each candidate for a doctor's degree must announce to the Dean of the Graduate School a thesis subject, approved by the head of the department concerned, not later than the first Monday in November of the academic year at the close of which the award of the degree is expected. A fair copy of the thesis must be submitted, with a certified approval of the committee on examinations, to the Council of Administration not later than the first day of June. If the thesis is approved by the Council, the candidate must have it printed and must deposit not less than one hundred copies with the librarian of the University.

FELLOWSHIPS AND SCHOLARSHIPS

The Trustees of the University have established eight fellowships, each with a stipend of three hundred dollars, payable in ten monthly installments.

The rules governing appointments to these fellowships are as follows:

1. The purpose of these fellowships is to promote advanced scholarship and original research in the University.
2. The fellowships are open to graduates of this and similar institutions. Those who are to complete an undergraduate course previous to the academic year for which

appointments are made are eligible with others, as candidates.

3. Nominations to fellowships, accompanied by assignments to special departments of the University, are made by the Council of Administration to the Trustees of the University, upon applications received by the President of the University each year not later than the first day of February. These nominations are made at a meeting of the Council called for that purpose within the month of February. The appointments by the Trustees are made at their regular meeting in March, and take effect the first day of the following September. Vacancies may be filled by similar nominations and appointments at other times.

4. Nominations to fellowships are made upon the grounds of worthiness of character, scholastic attainments, and promise of success in the principal line of study or research to which the candidate proposes to devote himself. Consideration is also given to the probable value or usefulness of the service of the candidate as an assistant in instruction, but this is not the primary object of the appointment. Other things being equal, preference is given to those graduates of this University who have pursued a specialized or group course.¹

5. Candidates must present, with their applications, full information concerning themselves and their qualifications for advanced study and research work, including any written or printed essays or results of investigation, and must name the subject in which they wish to do their major work.

6. Fellowships are good for one year, but appointments may be renewed to the same person. An appointment as *honorary fellow*, without stipend, may be made as specified for paid fellowships in the case of anyone who has held a regular fellowship and has shown distinguished merit in his work.

¹All members of the College of Engineering and of Agriculture, of the chemical and mathematical groups in the College of Science, of the College of Law, and of the Schools of Library Science and Music, are considered as pursuing specialized courses.

7. Fellows are constituted members of the Graduate School and have all of the privileges and bear all of the responsibilities of such membership. Each regular fellow may be called upon to render service in instruction throughout the year in the department in which his major subject lies, equal to one hour daily of class instruction or to two hours daily of laboratory supervision. This service will receive such credit as may be determined in each case. Blank forms for application may be obtained by addressing the Registrar, or the Dean of the Graduate School.

STATE SCHOLARSHIPS

A law passed by the General Assembly of the State of Illinois at the session of 1895 provides that there may be awarded annually to each county of the state one state scholarship and one additional scholarship for each senatorial district in excess of one in any county. The holder thereof must be a resident of the senatorial district to which he is accredited, and is entitled to free tuition in other than the preparatory and professional schools of the University.

A competitive examination under the direction of the Superintendent of Public Instruction shall be held at the county court house in each county of the state upon the first Saturday of June in each and every year by the county superintendent of schools upon such branches of study as said Superintendent of Public Instruction and the President of said University may deem best.

Questions for such examinations shall be prepared and furnished by the President of the University to the Superintendent of Public Instruction, who shall attend to the printing and distribution thereof to the several county superintendents of schools prior to such examinations.

The law also provides that in case the scholarship in any county is not claimed by a resident of that county, the Superintendent of Public Instruction may fill the same by

appointing some candidate first entitled to a vacancy in some other county.

Candidates to be eligible to a state scholarship must be at least sixteen years of age, and must have been residents of their respective counties for the year preceding the examination.

A student holding a state scholarship who shall make it appear to the satisfaction of the President of the University that he requires leave of absence for the purpose of earning funds to defray his expenses while in attendance, may, in the discretion of the President, be granted such a leave of absence, and may be allowed a period not exceeding six years from the commencement thereof for the completion of his course at said University.

The examinations will be held June 3, 1905 and June 2, 1906.

For particulars about them write to Hon. Alfred Bayliss, Superintendent of Public Instruction, Springfield, or to W. L. Pillsbury, Registrar, Urbana.

Any person, whether a candidate for scholarship or not, may be examined for admission to the University at these state scholarship examinations.

SCHOLARSHIPS IN AGRICULTURE AND HOUSEHOLD SCIENCE

The University offers every year to each county in the state, except Cook and Lake, and to each of the first ten congressional districts, one scholarship for prospective students of Agriculture in the College of Agriculture and one for prospective students of Household Science in the College of Literature and Arts, the College of Science, or the College of Agriculture.

Appointments are made by the Trustees of the University to scholarships in Agriculture upon the recommendation of the executive committee of the Illinois Farmers' Institute, and to scholarships in Household Science upon the recommendation of the County Domestic Science Asso-

ciations. Young men under 16 years of age and young women under 18 years of age and those who have already attended the University are not eligible. Acceptable candidates, residents of counties or districts for which appointments have been made, may be assigned to counties or districts not yet represented.

The scholarships are good for two years and relieve the holders from the payment of the matriculation fee, \$10.00, and the incidental fee, \$24.00 a year. The term of a scholarship may be extended four years, if, before it expires, the holder satisfies in full the requirements for admission to the freshman class of the college in which he is enrolled.

For further information address W. L. Pillsbury, Registrar, Urbana.

MILITARY SCHOLARSHIPS

Students who have gained 3 hours in class room military instruction and 4 in drill practice, are eligible for appointment as commissioned officers of the regiment or battery. Those attaining this rank may be awarded special scholarships, good for one year, and equal in value to the University incidental fees for the same length of time.

PRIZES

MILITARY DECORATIONS

Bronze medals typical of the University and its Military Department are awarded by the University to the members of the Infantry Company and Artillery Gun Detachment which shall score the greatest number of points at the Annual Competitive Drill. The medals so awarded become the permanent property of the recipients. A complete roster of the winning organizations is published in the University Catalog for the following year.

THE HAZELTON PRIZE MEDAL

Capt. W. C. Hazleton provided in 1890 a medal, of beautiful and artistic design, which is to be awarded, at a

competitive drill to be held near the close of the year, to the best drilled student. Each competitor must have been in attendance at the University at least sixteen weeks of the current college year; must not have had more than four unexcused absences from drill; and must present himself for competition in full uniform.

The award is made for excellence in these particulars:

1. Erectness of carriage, military appearance, and neatness.
2. Execution of the school of the soldier, without arms.
3. Manual of arms, with and without numbers.

The successful competitor will receive a certificate setting forth the facts, and may wear the medal until the 15th day of May following, when it will be returned for the next competition.

INTERSCHOLASTIC ORATORICAL CONTEST

A medal of the value of twenty dollars and two of the value of ten dollars each, are offered annually by the University to the high schools of the state for the best oration delivered in a competitive contest between their representatives. This contest takes place in the spring at the time of the interscholastic athletic meet.

THE BRYAN PRIZE

In 1898 Mr. William Jennings Bryan gave to the University two hundred and fifty dollars. From the interest of this sum a prize of twenty-five dollars is biennially offered for the best essay on the science of government. The contest is open to all matriculated undergraduate students. The essays may not be less than three thousand, nor more than six thousand, words in length, and must be left at the President's office not later than the second Wednesday in May. The prize was offered for the first time in 1901.

UNIVERSITY HONORS

The University has recently adopted the following plan whereby public official recognition is to be given to such

students as attain a very high grade of scholarship. The following is the plan adopted by the University Senate.

"Preliminary Honors. These shall be assigned on the completion of the sophomore year. The number of honors to be awarded shall not exceed one-tenth of the membership of the sophomore class. The exact number shall be determined by the Council of Administration, whose duty it shall be to receive the names of those students who are recommended by the various schools and colleges of the University, and after determining those who may receive honors, to report the list to the Senate. The basis of assignment shall be the scholarship of the student during the freshman and sophomore years. These honors shall be recommended by the schools and colleges and confirmed by the Senate in the manner above described.

"Final Honors. These shall be assigned on graduation. The basis for the assignment shall be the scholarship of the students during the junior and senior years. Not more than one-tenth of the senior class shall receive such honors. The method of award shall be the same as in the case of preliminary honors.

"Special Honors. These are awarded at the close of the senior year. No student may receive such honors who shall not have completed, before the beginning of senior year, at least twenty hours' work in the subject, or group of allied subjects, in which the honors are proposed; he must complete thirty hours' work in the same subject or group of allied subjects, by the end of his senior year, do such other work as the professor in charge may assign and must prepare an acceptable thesis. Special honors are awarded on the recommendation of the professor in charge, on the approval of the college or school in which the student is enrolled, and on confirmation by the senate."

The names of all students receiving honors appear in the University catalog. A condition or a failure disqualifies a student from receiving general preliminary honors; either

disqualifies a student from receiving final honors if received during junior or senior years. No student is eligible for special honors, who, during the period in which he is a candidate for the same, has received a grade of less than eighty-five in any subject.

Preliminary honors afford an opportunity for sophomores to secure recognition for high scholarship without waiting for graduating, as is often required. Final Honors are to be given to seniors in recognition of high scholarship, the terms being designed especially to favor students whose preparatory education has been so imperfect as to prevent them from obtaining preliminary honors. Special honors are planned for especially brilliant students who prefer to concentrate their efforts upon a special course. A student may be a recipient of both final and special honors.

TRAINING FOR TEACHERS

SPECIAL CERTIFICATE FOR HIGH SCHOOL TEACHERS

In addition to the usual diploma, the University will hereafter give graduates who meet certain requirements in the choice and pursuit of their four years' course, and who give personal promise of success in teaching, a special certificate of preparation for high school teaching. This certificate will specify the high school subjects which the holder is regarded by the University as qualified to teach. The exact conditions on which this certificate is granted will be found in a special circular soon to be issued by the University.

COMMITTEE ON APPOINTMENT OF TEACHERS

This committee has in charge the naming of candidates from among University graduates for positions as teachers or supervisors of public schools, or instructors in normal schools, colleges, and technical schools. All requests coming to the University to recommend candidates for such

positions go to this committee and should be addressed to the chairman, Professor H. A. HOLLISTER.

BENEFICIARY AID

EDWARD SNYDER DEPARTMENT OF STUDENTS' AID

In 1899 Professor Edward Snyder, Professor of the German language and literature, *emeritus*, gave the University the sum of \$12,000, to be loaned to worthy students to enable them to finish their courses in the University.

By action of the Trustees, this fund is available for junior, senior, and graduate students who need aid to remain and complete their work. The minimum loan made is fifty dollars (\$50), and the maximum loan is one hundred and fifty dollars (\$150) to a junior, and two hundred dollars (\$200) to a senior or graduate student. Notes of hand are taken for the amount of the loans, with 5 per cent. interest. The maximum time limit is three years for juniors, and two years from the ensuing thirtieth day of June for seniors and graduates.

Applications for loans are passed upon by the Council of Administration and approved by the Finance Committee of the Board of Trustees of the University.

Loans are made to matriculated students only who have attained at least the rank of full juniors, who have been in residence at this University at least one year, who are at the time students in residence at this University, and who have declared their intention to graduate.

In recommending loans preference is given to those students who are farthest along in their University work, who have shown themselves most assiduous and successful in their studies, and have shown habitual economy in life.

No distinction is made among students on account of sex or course of study.

A loan will not be recommended for any student who is

believed to have been financially or morally delinquent in any respect.

Information given by applicants is considered confidential by the University authorities.

Applications for loans must be addressed to

THE PRESIDENT OF THE UNIVERSITY.

Urbana, Illinois.

CLASS OF 1895 LOAN FUND

This is a fund of \$100.00¹ established by the class of 1895, to be loaned to needy and deserving students. According to the conditions of the gift, fifty dollars are to be loaned annually, and the benefit of the fund is open only to students who, at the time of application are members of the freshmen class only. No person may receive the benefit of the fund more than four years. The loan bears interest from the time the recipient leaves the University, and is due, one-half in five years, and one-half in six years, after matriculation. The management of the fund is in charge of the Council of Administration.²

MILITARY SCIENCE

The military instruction is under the charge of an officer of the United States Army. The course as a whole has special reference to the duties of officers of the line. A full supply of arms and ammunition is furnished by the War Department, including 800 cadet rifles and accoutrements and two field pieces of artillery.

Every male student able to perform military duty, and not excused for sufficient cause, is required to drill twice each week until he has gained credit for 4 semester hours. He is also required to study Drill Regulations for Infantry

¹ It was the intention of the class to make the fund \$250, but only \$100 have been paid in.

² Application should be made in the same way as for loans from the Snyder Fund. See p. 321.

and to recite upon the same once a week until he gains credit for one semester hour. The practical instruction begins as soon as possible after he enters the University. An Academy student carrying no freshmen studies and not expecting to matriculate during the year is not permitted to drill. The standings in study and drill are placed on record, with other class credits; one semester of recitations and drill count two hours, and the three remaining semesters of drill three hours, and are requisite to graduation in every University course.

Appointments in the regiment are made on nomination by the officer in charge and confirmation by the Council.

The regiment (three battalions of four companies each) is composed mainly of the members of the freshmen and sophomore classes. The non-commissioned officers are usually selected from the sophomore class, the lieutenants from the junior class, and the field officers and captains from the senior class and graduate school.

A special military scholarship, good for one year, is open to each student who attains the grade of a commissioned officer, the value of which is paid the holder at the close of the year.

An artillery detachment is organized mainly from the second year, or sophomore class, which receives practical instruction twice each week during the college year.

Toward the close of the year a committee appointed by the Council examines candidates for nomination to the Governor of the state to receive commissions as brevet captains in the state militia. Candidates must be members of the senior class in full standing at the time of this examination; must have completed the course of military studies; must have served four semesters as commissioned officers, and must be approved by the Council as having good reputations as scholars, officers, and gentlemen.

The Trustees have prescribed a uniform of cadet gray,

coat trimmed with black mohair braid, trousers with black cloth stripe, cut after the U. S. Army pattern.

In order that all uniforms worn at this University may be, in quality, make, and finish, in strict accordance with the specifications adopted by the Board of Trustees, all students enrolled in the military department are required to obtain them from that firm only that may, for the time being, be under agreement and bond with the Trustees to furnish said uniforms at a stated price and of standard quality.

The University Military Band is composed of students, and every full term of service therein is counted as one term of drill.

PHYSICAL TRAINING

FOR MEN

The main object of the work of this department is to preserve and improve the bodily health of the students by careful physical examinations, and rational prescriptions of exercises; by correcting physical deformities and imperfect development; by teaching proper methods of living; and by encouraging proper intercollegiate sports.

Each student is required to undergo a physical examination so that a correct knowledge of his bodily condition may be obtained, and proper exercises prescribed. Regular classes are formed for drill on the various gymnasium appliances. Lectures are given upon personal hygiene.

All competitive athletic games are under the direct supervision of the director of physical training, and his examination is required to show that membership on any team will not cause injury, but will tend to improve the physical condition. No student whose class work is unsatisfactory is allowed to play on a University team.

FOR WOMEN

The general health and development of the young women are carefully looked after by the instructor in charge of the women's gymnasium. Each student comes under the personal observation of the instructor and is given an examination, in order that her physical condition may be known, suitable exercise prescribed and advice given. The eclectic system adopted is designed to meet the special wants of each student. Systematic class drill is given in Swedish, American and Delsarte gymnastics, including free and light exercises, dumbbells, clubs, wands, marching, fancy-steps, the May-pole, games, basket ball, fencing, military drill, athletics, and, if advisable, exercise on the various pieces of apparatus.

The prescribed course is required of freshmen, unless physically disqualified.

The gymnasium is open at certain hours to all women of the University, under suitable restrictions.

The uniform consists of navy blue serge, regulation gymnasium suit, and shoes.

The grounds of the University afford ample means for out-door recreation. There are tennis and basket ball courts, and field for other athletic sports and games.

The women's gymnasium now occupies temporary quarters in the Hydraulic Laboratory Building, and is well equipped.

For an account of the gymnasium for women see page 48.

HOSPITAL ASSOCIATION

The Hospital Association is an organization of students to provide a fund for hospital care in case of sickness. The members of the association pay a fee of fifty cents each semester and the fund thus raised is used to pay the hospital expenses of members who may need such care. The fund is

under the control of a committee of the Council, and during the past five years the association has rendered valuable aid to a considerable number of members. Students are strongly advised to join the association.

SOCIETIES AND CLUBS

LITERARY SOCIETIES

The ADELPHIC and PHILOMATHEAN societies for men, and the ALETHENAI and ILLIOLA for women, meet weekly, on Fridays, throughout term time.

THE CHRISTIAN ASSOCIATIONS

The Young Men's and Young Women's Christian Associations have come to occupy a prominent place in the University life. Both are affiliated with the World's Student Christian Federation.

Six hundred and twenty-six men now belong to the Young Men's, and three hundred and seventy women to the Young Women's Association. Each association employs for full time a general secretary.

The Association House furnishes free for the use of all students reading room, library, parlors, piano, magazines and papers, correspondence tables, and telephone—a college home.

Religious meetings for men are held on Sunday mornings; for women on Thursday afternoons; and for both men and women on Monday evenings. There are frequent meetings for the promotion of social intercourse and good fellowship.

Courses in systematic Bible study and in modern missions are offered. During the year six hundred and twenty-five men and two hundred women have enrolled in these courses. A most helpful feature of the work is that in the interest of new students at the opening of the school year. Desirable rooms and boarding places are found and posted

for reference at the Association House. Representatives of the Association meet the trains, assist students in finding satisfactory locations, and endeavor in every way to make them feel at home. The employment bureau helps to find work.

A copy of the Students' Hand-Book, containing a map of the cities, and giving information about Urbana and Champaign, the University, and the various college organizations and activities, will be sent free to prospective students.

For this Hand-Book, or for further information, address the General Secretary of either Association.

CLUBS AUXILIARY TO COURSES OF STUDY

AGRICULTURAL CLUB

This club meets weekly. It is devoted to the discussion of topics of theoretical and practical interest to students of agriculture. All students connected with the University are eligible to membership.

ARCHITECTS CLUB

This club meets once in two weeks for the consideration of current topics of architectural interest and subjects connected with the study of architectural history. All students pursuing architectural studies are eligible to membership. This club is a member of the Architectural League of America, and contributes to its annual exhibition in the principal cities of the United States.

BIOLOGICAL THEORY CLUB

This club meets on alternate Monday evenings throughout the college year for papers, addresses, and discussions on subjects in theoretical biology. Its membership is composed of instructors in biological subjects in the Colleges of Science and Agriculture.

CIVIL ENGINEERING CLUB

This club meets on the second and fourth Saturday evenings of each month for the reading and discussion of papers relating to civil engineering. All students pursuing the civil engineering course may become members.

COMMERCIAL CLUB

The Commercial Club is composed of students in the courses of training for business. It meets on alternate Tuesday evenings to hear addresses from practical business men and to discuss commercial topics.

ENGLISH CLUB

The English Club is composed of members of the Faculty, and of students who have done especially good work in English. The work of the club is confined to the study of recent writers of fiction and of poetry. The membership is limited to thirty. Meetings are held on the second Monday of each month.

FRENCH CLUB

Le Cercle Francais includes students who have had at least one year's work in French. The club meets twice a month throughout the year. Its proceedings are conducted in French, the object being to supplement the work of the class room by the practical handling and understanding of the language.

GERMAN CLUB

Der Deutsche Verein includes students who have pursued the study of German for two years, and others who have a speaking knowledge of the language. Its proceedings are conducted entirely in German, meetings are held twice a month and programs of a literary, conversational, and musical nature are presented.

HOUSEHOLD SCIENCE CLUB

This club, which meets on alternate Wednesdays, is intended to foster general interest in household science. Its

meetings are devoted to a discussion of topics relating to that subject.

LIBRARY CLUB

Any member of the staff of the University library, of the Champaign public library, or of the Urbana public library, or any student who is registered for the Library School may become an active member of the Library Club. Trustees of the three libraries before mentioned are considered honorary members. Any others interested in library progress may become associate members.

Meetings are held once in three weeks during the college year. The first and last meetings of the year are of a social nature. The intervening meetings are devoted to topics of literary or technical library interest.

MATHEMATICAL CLUB

The Mathematical Club is open for membership to the instructors and students of mathematics at the University. It meets once in two weeks to discuss questions of interest in pure and applied mathematics.

MECHANICAL ENGINEERING CLUB

This club meets on the second and fourth Friday evenings of each month. All students pursuing mechanical engineering studies are eligible to membership. Papers relating to subjects of interest to members are presented and discussed at each meeting.

MUSICAL CLUBS

These are described under the School of Music (pp. 151).

NATURAL HISTORY SOCIETY

This society is composed of instructors and students interested in the natural sciences. It conducts field excursions and exhibitions of objects of natural history, and provides occasional lectures on science subjects of general interest.

POLITICAL SCIENCE CLUB

This club is composed of the members of the corps of instruction in history, economics, and law, and of such students of junior and senior standing as make a record for marked excellence in work in these departments. It meets once a month.

SCANDINAVIAN CLUB

The Scandinavian Club was organized in 1900 for the purpose of bringing together all students having a knowledge of at least one of the Scandinavian languages. Meetings are held during the academic year, at which subjects connected with the northern countries, especially with their literatures, are discussed.

SOCIETY OF ELECTRICAL ENGINEERS

The Society of Electrical Engineers has been organized to include students in electrical engineering or those specially interested in the work. They have meetings alternating with those of the Society of Mechanical Engineers.

ZOOLOGICAL CLUB

The University Zoölogical Club is composed of advanced students and instructors in the zoölogical and physiological departments, together with such other biological instructors and advanced students as are interested in its subjects. Its sessions are devoted to the presentation and discussion of abstracts of recent biological literature and of the results of investigation by the members of the club. It meets weekly in Natural History Hall.

EXPENSES

BOARD

The University does not furnish board. There are a large number of suitable private places in Urbana and Champaign, within walking distance of the University, and easily accessible by electric railway, where students can obtain table board and rooms. There are several students' clubs at which the cost of meals is about three dollars a week.

The Business Manager and the Young Men's and Young Women's Christian Associations of the University will aid new students in procuring rooms and boarding places.

The University year is divided into semesters, each covering eighteen weeks of instruction, and fees are payable accordingly. There is a recess of two weeks at the Christmas holidays.

For dates of opening and closing, see Calendar, p. 7.

FEES

Literary, Technological, Scientific, and Agricultural Departments

MATRICULATION FEE. Each student not holding a scholarship, upon satisfying the requirements for admission to the University, pays the matriculation fee of.....	\$10 00
THE DIPLOMA FEE, payable before graduation, is.....	5 00
THE INCIDENTAL FEE. All students, except those holding scholarships, pay, each semester, an incidental fee of....	12 00
TUITION FEE. Students "conditioned" on entrance requirements, and "special" students (see p. 72), except special students holding scholarships, pay, each semester, a tuition fee of	7 50

LABORATORY FEES AND DEPOSITS. Each student working in laboratories, or in the drafting or engineering classes, is required to make a deposit varying from 50 cents to \$10.00, to pay for chemicals and apparatus used, and for any breakages or damages.

Music Department

Students who are residents of Illinois, not including members of the Graduate School, will, if they are matriculated, pay for instruction in music of college grade the "incidental" fee only.....\$12 00

All other students receiving instruction in music of college grade and all students receiving instruction in music of preparatory grade, pay special fees as follows:

College. Preparatory.

Piano, organ, voice, or violin or other stringed instrument, two lessons a week, each semester	\$32 50	\$19 50
Same, one lesson a week.....	19 50	11 00
Students in harmony, counterpoint, fugue, etc., pay, each semester		9 00

[If students are regularly enrolled in other departments, the fees for college music are reduced to \$25.00 and \$15.00; and for preparatory music to \$15.00 and \$8.50, each semester.]

Special students, taking music only, may enter classes in Physical Training (see p. 288) on paying each semester..\$ 7 50

No deduction is made on account of absence in any course, except in case of protracted illness.

Students can rent pianos for practice by applying to the head of the music department.

College of Law

Students of the College of Law, upon satisfying the requirements for admission, pay the matriculation fee of.....	\$10 00
Tuition fee, each semester.....	25 00
Students conditioned on entrance requirements pay, each semester, an additional fee of.....	7 50

College of Medicine

Matriculation fee, paid each year.....	\$ 5 00
General ticket, each year.....	120 00
Laboratory deposit, freshman and sophomore years.....	20 00
Laboratory deposit, junior year.....	5 00
Dissections, per part and County Hospital ticket, each.....	5 00
Maternity hospital fee, payable once during senior year.....	15 00

School of Dentistry

Matriculation fee, each year.....	\$ 5 00
General ticket, each year.....	100 00
Laboratory ticket, first and second years.....	10 00
Dissecting fee, first and second years.....	5 00
Final examination fee, third year.....	20 00

School of Pharmacy

Tuition fee, each year.....	\$ 75 00
Laboratory deposit, each year.....	5 00
Diploma fee.....	5 00

Academy

All pupils in the Academy pay, each semester, an "incidental" fee of.....	\$ 12 00
Also a tuition fee of.....	7 50

ALL BILLS due the University are due and payable within ten days after the student enters classes.

AVERAGE ANNUAL EXPENSES

The following are for students attending at Urbana, estimated average annual expenses, *exclusive* of books, clothing, railroad fare, laboratory fees, if any, and small miscellaneous needs:

¹ Semester fees.....	\$ 24 00 to \$ 24 00
Room rent for each student (two in room)....	36 00 " 60 00
Table board in boarding houses and clubs.....	108 00 " 124 00
Washing	18 00 " 24 00
Total	\$186 00 to \$232 00
Board and room in private houses, per week...	4 50 " 6 00

¹ Students of law and music, special students, and pupils of the Academy, must make needed changes in the amount given for "semester fees."

In addition to the above, freshmen pay a matriculation fee of \$10.00, and the young men are required to buy a cadet uniform at \$15.00. Freshmen engineering students will need to buy a set of drawing instruments at a cost of about \$18.00. Other necessary expenses will need to be taken into consideration. Three hundred and forty scholarships are offered each year. These cover the student's incidental fees and the matriculation fee. For all the necessary expenses of the year, the average student is not likely to live for less than \$275.00 or \$300.00.

CAUTION TO PARENTS—STUDENTS' FUNDS

The Business Manager will receive on deposit any funds parents may entrust to him to meet the expenses of their sons and daughters. No greater error can be committed than to send young people from home with large amounts of spending money, and without the authoritative care of some prudent friend. Half the dissipation in colleges springs from excessive allowances of money.

ACADEMY

INSTRUCTORS

FRANK HAMSHER, A. B., PRINCIPAL, History.

MARGARET SCOTT, German and French.

JOSEPH H. GORDON, A. M., History and Geometry.

JOHN T. JOHNSON, Natural Sciences.

FLORENCE M. SMITH, A. M., English Literature and Composition.

CHARLES W. WHITTEN, Physics and Geometry.

WILLIAM G. PALMER, A. M., Latin and Greek.

CHARLES M. McCONN, A. M., English and Composition.

HARRY W. REDDICK, A. B., Mathematics.

The Academy is a preparatory school maintained by the University. Its course of study, methods, and equipment correspond in general to that of the best high schools. While its special aim is to prepare students for the University, it offers an excellent training of the high school grade to those who cannot get it at home. It draws its members especially from the following classes of students: those from the country who have no high school opportunities at home; those whose home school offers but a two or three years' course; those who have been delayed in their education and wish to prepare for college, but are unwilling to return to the high school; and, finally, those who feel that there is an advantage in preparing for college in a regular preparatory school. Because of its close relationship with the University the Academy has special advantages in preparing students for college. Its students are entitled to all of the general privileges of the University, and in becoming acquainted

with university life they learn much that is valuable to them when they enter upon their college work.

ADMISSION

ENTRANCE.—Graduates of the eighth grade of city public schools, or of the graded county schools, are admitted to the Academy without examination upon the presentation of a diploma or certificate of graduation from the city or county superintendent. Other applicants must pass an examination in Arithmetic, Grammar, Geography, and American History.

ADMISSION TO ADVANCED STANDING. Students who come from the accredited schools of the University are admitted to advanced standing, receiving credit for work already done. Students who have attended schools that are not accredited are admitted on the presentation of a certificate showing the amount, character, and grade of work done by the applicant. Upon the basis of this statement the student is assigned to those classes for which he is prepared. At the end of the first semester's work, if the student's work has been of a high grade, the credits from the former school are accepted in those subjects that have been continued in the Academy. For advanced credit in other subjects examinations must be passed. Those who wish to take examinations for advanced credit in the laboratory sciences must present a note book. Blanks for reports of work done in other schools are furnished upon application. The examinations in 1905 will be held September 13-16. For a program of examinations see page 71.

COURSE OF STUDY

The course of study consists of the subjects included in the entrance requirements. A general statement of the aim and scope of the work undertaken in the various subjects may be found on pages 64 ff, under the title "Description of Subjects Accepted for Admission."

The time necessary to complete the entrance requirements is not fixed, but depends upon the ability and previous training of the student. When a student reaches the point that all of his time is not required for his entrance work, he is permitted to fill up his program of studies with classes in the University.

The course of instruction is so arranged that students may enter either semester.

COURSE OF INSTRUCTION

FIRST SEMESTER.—¹Algebra 1; Review Algebra; Plane Geometry 1; Plane Geometry 2; Solid Geometry; English 1; English 3; English 5; Latin 1; Latin 3; Latin 5; Greek 1; Greek 3; German 1; German 3; French 1; French 3; Physics 1; Zoölogy; Physiology; Art and Design 1; English History; Ancient History; Modern History.

SECOND SEMESTER.—Algebra 1; Algebra 2; Plane Geometry 1; Plane Geometry 2; Solid Geometry; English 2; English 4; English 6; Latin 2; Latin 4; Latin 6; Greek 2; Greek 4; German 2; German 4; French 2; Physics 2; Physiography; Art and Design 1; Art and Design 2; Botany; American History; English History; Civics; Political Economy.

REGULATIONS

Reports regarding students will be sent to parents at the close of each semester upon request.

The calendar of the Academy is the same as that of the University.

For further information about fees and expenses, see page 333.

For special information with regard to the Academy of University of Illinois, address FRANK HAMSHER, Principal, Urbana, Ill.

¹ The figures 1, 2, 3, etc., following subjects, indicate the first, second, etc., semesters of study of the several subjects; thus, French 1 means beginning French, French 3 the first semester of the second year's work in French.

LIST OF STUDENTS

LITERARY, TECHNOLOGICAL, SCIENTIFIC, AND AGRICULTURAL DEPARTMENTS

GRADUATE SCHOOL

CANDIDATES FOR THE DEGREE OF DOCTOR OF PHI- LOSOPHY

- Heuse, Edward Otto, B. S., (*Hanover Coll.*), 1901, *Greenville*, Chem-
istry.
- Pillsbury, Bertha Marion, A. M., (*Radcliffe Coll.*), 1898, *Urbana*,
English.
- ¹Ross, Luther Sherman, M. S., 1900, *Des Moines, Ia.*, Biology of
Subterranean Crustaceans.
- Sakagami, Yasuzo, M. L., (*Univ. of Minn.*), 1899, *Wakagamaken*,
Japan, Political Science.
- Sammis, John Langley, M. S., 1899, *Champaign*, Chemistry.
- Schulz, William Frederick, E. E., 1900, *Urbana*, Electrical Engineer-
ing.
- Wilson, Albert Harris, M. S., (*Vanderbilt Univ.*), 1893, *Champaign*,
Mathematics.

CANDIDATES FOR A MASTER'S DEGREE

- Armeling, Carl Elmer, A. B., 1904, *Mason City*, Latin.
- Barrett, James Theophilus, A. B., 1903, *Urbana*, Botany.
- ¹Bond, Anna Louise, A. B., 1903, *Mt. Vernon*, English.
- ¹Booker, Lucile Alice, A. B., 1899, *Stillwater, Minn.*, English.
- Briscoe, Charley Francis, A. B., (*Indiana Univ.*), 1899, *Urbana*,
Botany.
- Brown, Fay Cluff, A. B., (*Indiana Univ.*), 1904, *Washington Court*
House, O., Physics.

¹*In absentia.* see p. 312.

- Bullock, Jessie Jane, A. B., 1900, *Champaign*, Mathematics.
- Burford, Cary Clive, A. B., 1904, *Urbana*, Psychology.
- ¹Church, Walter Samuel, B. S., 1900, *Chicago*, Architecture.
- ¹Clark, Mary Edith, A. B., 1899, *Sheldon*, Philosophy.
- Clark, Samuel C, B. S., (*Univ. of Chicago*), 1900, *Urbana*, Chemistry
- Crane, Fred Randall, B. S., (*Mich. Agr'l Coll.*), 1899, *Urbana*, Architecture of Farm Buildings.
- Cresap, Trella Jane, A. B., 1904, *Urbana*, English.
- Crosthwait, George Ashley, B. S., 1903, *Moscow, Idaho*, Farm Management.
- ¹Davis, John Wolfersperger, B. S., 1904, *Chicago*, Civil Engineering.
- Dietrich, William B. S. A., (*Univ. of Wis.*), 1899, *Urbana*, Animal Husbandry.
- ¹Dillon, Gertrude Sempill, A. B., 1901, *Sheldon*, German.
- Dirks, Henry Bernhard, B. S., 1904, *Champaign*, Mechanical Engineering.
- Emmett, Arthur Donaldson, B. S., 1901, *Urbana*, Chemistry.
- Fisher, Stephen Elias, A. B., (*Eureka Coll.*), 1900, *Champaign*, History.
- Forbes, Marjorie Douglas, A. B., 1903, *Urbana*, German.
- Fox, Harry Bert, B. S., 1900, *Urbana*, An Investigation of Clays.
- Franklin, Lois Gertrude, A. B., 1903, *Dwight*, History.
- Fritter, Enoch Abraham, A. M., (*Findlay Coll.*), 1898, *Normal*, English.
- ¹Fucik, Edward James, B. S., 1901, *Chicago*, Civil Engineering.
- ¹Gage, Ralph Hawes, B. S., 1903, *Chicago*, Civil Engineering.
- Garner, Alfred William, B. S., (*Miss. Agr'l and Mech. Coll.*), 1900, *Topisaw, Miss.*, History.
- Garnett, Elmer Logan, A. B., 1904, *Plymouth*, Economics.
- von Geller, Henry William, B. S. A., (*Mich. Agr'l Coll.*), 1904, *Chicago*, Soil Fertility.
- Good, Edwin Stanton, B. S., (*Mich. Agr'l Coll.*), 1903, *Urbana*, Animal Husbandry.
- Gray, Daniel Thomas, A. B., B. S., (*Univ. of Mo.*), 1904, *Champaign*, Agriculture.
- ¹Greenman, Edwin Gardner, Jr., B. S., 1902, *Champaign*, Mechanical Engineering.

¹*In absentia.*

- ¹Grimes, George Lyman, B. S., 1897, *Kewanee*, Mechanical Engineering.
- Hadfield, Frank Stanley, B. S., 1904, *Champaign*, Mechanical Engineering.
- Hall, Louis Dixon, B. S., 1899, *Champaign*, Animal Husbandry.
- ¹Harman, John James, B. S., 1902, *Champaign*, Mechanical Engineering.
- Hayhurst, Emery Roe, A. B., 1903, *Maywood*, Physiology.
- ¹Hays, Carl J, B. S., 1901, *Urbana*, Civil Engineering.
- Herron, Belva Mary, B. L., (*Univ. of Mich.*), 1889, *Mexico, Mo.*, Economics.
- ¹Higgins, Francis Whitson, B. S., 1902, *Niagara Falls, N. Y.*, Analytical Chemistry.
- ¹Hicks, Byron Wallace, B. S., 1901, *Warren*, Civil Engineering.
- ¹Honens, Frederick William, B. S., 1896, *Sterling*, Civil Engineering.
- ¹Hoppin, Charles Albert, B. S., 1901, *Milwaukee, Wis.*, Mechanical Engineering.
- Hughes, Clarence Wilbert, A. B., 1900, *Urbana*, History.
- Ingels, Bert Dee, B. S., (*DePauw Univ.*), 1903, *Greencastle, Ind.*, Chemistry.
- ¹Ireland, Washington Parker, B. S., 1903, *Chicago*, Civil Engineering.
- ¹Johnson, Fred Vollentine, B. S., 1902, *Harvey*, Mechanical Engineering.
- ¹Johnson, Frederick Dawson, B. S., 1903, *Alton*, Mechanical Engineering.
- Jones, Warren, A. B., 1902, *Aurora*, Education.
- ¹Kable, James Franklin, B. S., 1899, *Virden*, Architecture.
- ¹Kofoed, Reuben Nelson, A. B., 1902, *Buffalo, N. Y.*, Analytical Chemistry.
- ¹Kreissinger, Henry, B. S., 1904, *Chicago*, Mechanical Engineering.
- Lake, Edward John, B. S., 1895, *Champaign*, Architecture.
- Lohr, Vergil Clayborne, B. S., (*Knox Coll.*), 1902, *Mendon*, Chemistry.
- McAnulty, Ethel Electa, B. S., (*Carthage Coll.*), 1903, *Carthage*, German.
- ¹McConnell, Ernest, B. S., 1894, *Denver, Colo.*, Architecture.
- ¹McLane, John Wallace, B. S., 1901, *Washington, D. C.*, Investigation of Soil Moisture.

¹*In absentia.*

- Malcolm, Charles Wesley, B. S., 1902, *Roseville*, Civil Engineering.
- Manspeaker, Pearle, A. B., 1904, *Champaign*, Latin.
- Mather, Myra Abbie, A. B., 1904, *Joliet*, German.
- ¹Matthews, Robert Clayton, B. S., 1902, *Champaign*, Mechanical Engineering.
- ¹Mayall, Edwin Lyman, B. S., 1900, *Peoria*, Mechanical Engineering.
- ¹Meier, William, B. S., 1901, *Chicago*, Civil Engineering.
- Meyer, Ido Franklin, Ph. B., (*Iowa Coll.*), 1904, *Macomb*, Psychology.
- Miller, Harry Crawford, *Nokomis*, Education.
- Moor, Rev. George Caleb, Ph. D. (*Ewing Coll.*), 1902, *Champaign*, English.
- Naylor, Helen Andromache, A. B., 1904, *Mason City*, Latin.
- Obrecht, Rufus Chancey, B. S. A., (*Iowa State Coll.*), 1901, *Urbana*, Animal Husbandry.
- Ocock, Charles Albert, B. S., 1904, *Urbana*, Architecture of Farm Buildings.
- Parker, Lawrence Gilbert, B. S., 1902, *Toluca*, Civil Engineering.
- ¹Parr, Robert William, A. B., 1903, *Pontiac*, Economics.
- Pitts, Florence Elizabeth, A. B., 1904, *Bloomington*, English.
- Ponzer, Ernest William, B. S., 1900, *Champaign*, Mathematics.
- Post, Raeburn Henry, B. S., 1904, *Champaign*, Mechanical Engineering.
- ¹Radcliffe, William Hickman, B. S., 1901, *Chicago*, Civil Engineering.
- Randall, Dwight T, B. S., 1897, *Urbana*, Mechanical Engineering.
- Reddick, Harry Wilfred, A. B., (*Indiana Univ.*), 1904, *Knightstown, Ind.*, Mathematics.
- Rees, Maurice Holmes, A. B., (*Monmouth Coll.*), 1904, *Newton, Ia.*, Experimental and Physiological Zoölogy.
- ¹Richart, Frederick William, B. S., 1891, *Carterville*, Mechanical Engineering.
- Ricker, Ethel, B. S., 1904, *Urbana*, Architecture.
- Rolfe, Martha Deette, B. S., 1900, *Champaign*, Physiography.
- ¹Sawyer, George Loyal, B. S., 1903, *Chicago*, Municipal and Sanitary Engineering.
- Sayers, William Wesley, B. S., 1897, *Chicago*, Mechanical Engineering.

¹*In absentia.*

Schaub, Ira Obed, B. S., (*N. C. Coll. of Agr'l and Mech. Arts*), 1900, *Urbana*, Soil Fertility.

¹Scudder, Harry Disbro, B. S., 1902, *Chicago*, Agriculture.

¹Skinner, Elgie Ray, B. S., 1903, *Chicago*, Mechanical Engineering.

Slocum, Roy Harley, B. S., 1900, *Urbana*, Municipal and Sanitary Engineering.

Smith, Florence Mary, A. B., 1899, *Urbana*, English.

¹Smith, George Russell, B. S., 1900, *Urbana*, Mechanical Engineering.

¹Soverhill, Harvey Allen, B. S., 1900, *Beloit, Wis.*, Mechanical Engineering.

¹Sperling, Godfrey, B. S., 1895, *Boise, Idaho*, Civil Engineering.

Stark, Robert Watt, B. S., 1895, *Urbana*, Chemistry of Potable Waters.

Strehlow, Cornelia Emma, A. B., 1903, *Champaign*, German.

¹Strehlow, Oscar Emil, B. S., 1896, *Tuscaloosa, Ala.*, Civil Engineering.

¹Stine, John Carl, A. B., 1903, *Assumption*, Zoölogy.

¹Sussex, James Wolfe, B. S., 1903, *Abingdon*, Civil Engineering.

¹Swanberg, Floyd Ludwig, B. S., 1902, *Danville*, Mechanical Engineering.

¹Terry, Charles Dutton, B. S., 1897, *Kewanee*, Mechanical Engineering.

¹Viers, David Carroll, B. S., 1901, *Urbana*, Mechanical Engineering.

Waterbury, Leslie Abram, B. S., 1902, *Urbana*, Civil Engineering.

Webber, Roy Irvin, B. S., (*Purdue Univ.*)' 1899, *Urbana*, Civil Engineering.

Webster, William W, B. S., 1899, *San Bernardino, Cal.*, Mechanical Engineering.

¹Weeks, Harry William, A. B., B. S., (*Lombard Coll.*), 1900, (*Univ. of Ill.*), 1904, *Jackson, Mich.*, Mechanical Engineering.

¹Whitehouse, Edith Ursula, A. B., 1902, *Canton*, Latin.

¹Whitsitt, Hammond William, B. S., 1903, *Urbana*, Architecture.

Wilcox, Burton B, A. B., (*Northwestern Univ.*), 1904, *Kewanee*, Chemistry.

Willcox, Maurice Meacham, B. S., 1899, *Kentwood, La.*, Civil Engineering.

Williams, Elrick, A. B., 1902, *Illioopolis*, Chemistry of Foods.

Willis, Clifford, B. S., 1900, *Urabana*, Entomology.

¹*In absentia.*

Wilson, Leroy C, B. S., 1904, *Princeton*, Agriculture.

Worthen, Edmund Louis, B. S., 1904, *Warsaw*, Agriculture.

¹Wood, Harvey Edgerton, A. B., 1900, *Joliet*, Economics.

¹Wright, Sidney Walter, A. B., 1901, *Mechanicsburg*, History.

Zimmerman, Walter Herman, B. S., 1897, *De Kalb*, Mechanical Engineering.

¹Zipf, Ferdinand, A. B., 1902, *Hopedale*, Mathematics.

NOT CANDIDATES FOR A DEGREE

Lloyd, Robert Clinton, B. S., 1903, *Canton*.

Palmer, Mrs. Anna Shattuck, M. L., 1895, *Urbana*.

Sparks, Marion Emeline, B. L. S., 1899, A. M., 1900, *Urbana*.

White, Marion Ballantyne, Ph. B., (*Univ. of Mich.*), 1903, *Champaign*.

SENIORS

In the list which follows, "L. and A." stands for College of Literature and Arts; "S." for the College of Science.

Abrams, Duff A,	<i>Murphysboro,</i>	Civil Eng'g.
Agnew, Ralph,	<i>Chesaning, Mich.,</i>	Civil Eng'g.
Akers, Milton Kent,	<i>Homer,</i>	Electrical Eng'g.
Allen, Grace Matilda,	<i>Wenona,</i>	General, L. and A.
Allen, Mary Elizabeth,	<i>Wenona,</i>	General, L. and A.
Allen, Paschal,	<i>Delavan,</i>	Agriculture.
Anders, Edwin,	<i>Newark,</i>	General, L. and A.
Anderson, Leslie Lee,	<i>Summer Hill,</i>	Agriculture.
Armstrong, Charles Edward,	<i>Mound City,</i>	Electrical Eng'g.
Bagley, Helen Antoinette,	<i>Oak Park,</i>	Library, 1st year.
Bailey, Thomas Stanley,	<i>Vincennes, Ind.,</i>	Chemistry.
Baker, Imo Estella,	<i>Champaign,</i>	General, L. and A.
Baker, Ira Webster,	<i>Champaign,</i>	General, L. and A.
Barker, Mary Elton,	<i>Chicago,</i>	General, L. and A.
Barnard, Lela Ethelyn,	<i>Chicago,</i>	General, L. and L.
Barnhart, Charles Anthony,	<i>Urbana,</i>	Mathematics.
Barton, Olive Lillian,	<i>Pittsfield,</i>	Mathematics, L. and A.
Bascom, George Rockwell,	<i>Chicago,</i>	Municipal Eng'g.
Bass, Willard Jason,	<i>Canton,</i>	Mechanical Eng'g.
Beck, Charles,	<i>Harvey,</i>	Mechanical Eng'g.
Bell, Marian Cinderella, A. B., (<i>Univ. of Neb.</i>), 1904.	<i>Monmouth,</i>	Library, 1st year.

¹In absentia.

Belting, Flora Pearl Mabel,	<i>Mattoon,</i>	General Science.
Benson, Arthur Chapman,	<i>Vienna,</i>	General, L. and A.
Betts, David Roy,	<i>Springfield,</i>	Mechanical Eng'g.
Bishop, George William,	<i>Bloomington,</i>	General Science.
Blair, Franklin Irving,	<i>Paw Paw,</i>	Civil Eng'g.
Bond, Bertha Julia,	<i>Charleston,</i>	Library, 2nd year.
Bond, John Myron,	<i>Champaign,</i>	Mechanical Eng'g.
Boner, Halbert Evans,	<i>Urbana,</i>	Mechanical Eng'g.
Bonnell, Everett Shannon,	<i>La Moille,</i>	Mechanical Eng'g.
Borton, Byron Sarver,	<i>De Land,</i>	General, L. and A.
Bowser, Ralph Emmett,	<i>Forest City,</i>	Electrical Eng'g.
Braden, Clarence Arthur,	<i>Cutler,</i>	Agriculture.
Brayton, Abby,	<i>La Crosse, Wis.,</i>	Library, 2nd year
Brydges, Carl Kent,	<i>Elgin,</i>	Electrical Eng'g.
Bullard, Helen Elizabeth,	<i>Springfield,</i>	General, L. and A.
Burnett, William Thomas,	<i>Urbana,</i>	Electrical Eng'g.
Burwash, Lois Irene,	<i>Champaign,</i>	General Science.
Calhoun, Helen Vera,	<i>Champaign,</i>	Library, 2nd year.
Camp, Cara Louis,	<i>Lincoln,</i>	Civil Eng'g.
Carleton, Bertha M,	<i>St. Clair, Mich.,</i>	General, L. and A.
Carmichael, Berton Eugene,	<i>Rochelle,</i>	Agriculture.
Carr, Maurice LeRoy,	<i>Avon,</i>	Electrical Eng'g.
Carter, Ralph Merle,	<i>Decatur,</i>	Prep. to Medicine.
Casserly, Thomas David,	<i>Champaign,</i>	Mechanical Eng'g.
Caswell, Julia Ethel,	<i>Urbana,</i>	General, L. and A.
Center, Orlo Dorr,	<i>Ottawa,</i>	Agriculture.
Chester, Anna,	<i>Champaign,</i>	General, L. and A.
Clark, Alice Hartzel,	<i>Roswell, N. M.,</i>	Architecture.
Clark, Ella Hazel,	<i>Roswell, N. M.,</i>	General Science.
Clark, William Arthur,	<i>Urbana,</i>	Prep. to Medicine.
Clay, Marcia Barnes,	<i>New Bristol, O.,</i>	Library, 2nd year.
Clay, William Wharton,	<i>Chicago,</i>	Architectural Eng'g.
Clendenin, Lois Grace,	<i>Cairo,</i>	General, L. and A.
Cohen, Berthold,	<i>Chicago,</i>	Mechanical Eng'g.
Collins, Herbert Keith,	<i>Rock Island,</i>	Architectural Eng'g.
Collins, Mary,	<i>La Salle,</i>	General Science.
Cook, Ernest,	<i>St. Joseph,</i>	General, L. and A.
Corrin, William Garret,	<i>Neola, Ia.,</i>	Civil Eng'g.
Crane, Helen Mary,	<i>Indianapolis, Ind.,</i>	Library, 2nd year.
Crosby, Clifford,	<i>Kewanee,</i>	General Science.

Cross, Ethan Allen,	<i>Campbell Hill,</i>	General, L. and A.
Curfman, Lawrence Everett, B. S.,		
1901,	<i>Urbana,</i>	Civil Eng'g.
Currie, Florence Baxter,	<i>Milwaukee, Wis.,</i>	Library, 1st year
Cutler, Frank Woodbury,	<i>Rockford,</i>	Mechanical Eng'g.
Dart, Whitman,	<i>Rock Island,</i>	Architecture.
Davidson, Thomas Meredith,	<i>Champaign,</i>	Civil Eng'g.
Davis, Anna Clara,	<i>Carbondale,</i>	General, L. and A.
Davis, Forrest Spurgeon,	<i>Urbana,</i>	General, L. and A.
Davis, Olive Ermengarde,	<i>Oak Park,</i>	Library, 1st year.
Denny, Christina,	<i>Lincoln,</i>	Library, 1st year.
Derr, Harry Benjamin,	<i>Champaign,</i>	Agriculture.
Dickey, Cromwell Bartlett,	<i>New York, N.Y.,</i>	Chemical Eng'g.
Dickson, Helen Sarah,	<i>Champaign,</i>	Library, 1st year.
Dillavou, John Milford,	<i>De Land,</i>	Business, L. and A.
Dosch, Charles Fred,	<i>Chicago,</i>	Mechanical Eng'g.
Drury, Francis Keese Wynkoop,		
A. M., (<i>Rutgers Coll.</i>), 1905,	<i>Ghent, N. Y.,</i>	Library, 2nd year.
Dunn, Joel Ernest,	<i>Fordice,</i>	Civil Eng'g.
Echols, Silas,	<i>McLeansboro,</i>	General, L. and A.
Eckhardt, William George,	<i>Buffalo Prairie,</i>	Agriculture.
Edmiston, Emma,	<i>Sullivan,</i>	General, L. and A.
Eiker, William Henry,	<i>Sparta,</i>	Civil Eng'g.
Elden, Ralph Waldo,	<i>Elburn,</i>	Municipal Eng'g.
Elliott, Josephine Ruth,	<i>Sterling,</i>	Library, 2nd year.
Erickson, Cecil Claire,	<i>Farmer City,</i>	General, L. and A.
Ernest, Roy Alfred,	<i>Urbana,</i>	Electrical Eng'g.
Eustis, Laura Mae,	<i>Ottawa</i>	General, L. and A.
Evans, Kenneth Neill, A. B., 1904,	<i>Taylorville</i>	Civil Eng'g.
Ewing, Charles Edwin,	<i>Decatur,</i>	Civil Eng'g.
Fargo, Mattie Pauline,	<i>Lake Mills, Wis.,</i>	Library, 1st year.
Fleming, Rose Eilene,	<i>Bement,</i>	General, L. and A.
Fleming, Virgil R,	<i>Denver,</i>	Civil Eng'g.
Forbes, Mabel Frances,	<i>Chicago,</i>	General, L. and A.
Forrest, Elizabeth,	<i>Chicago,</i>	Library, 1st year.
Foskett, Roy Mortimer,	<i>Chicago,</i>	Mechanical Eng'g.
Fountain, Sampson James, B. S.,		
(<i>Agr'l and Mech. Coll. of</i>		
<i>Texas</i>), 1901,	<i>College Station, Tex.,</i>	Architecture.
Fox, James Reuben,	<i>Rockford,</i>	Electrical Eng'g.

Franceway, Margaret,	<i>Granville,</i>	General, L. and A.
Fyfe, Isabella,	<i>St. Joseph, Mich.,</i>	Library, 2nd year.
Gallaher, George Puffer,	<i>Lostant,</i>	Political Science.
Garwood, Frank Sanders,	<i>Stonington,</i>	Agriculture.
Garwood, Herman Edwin,	<i>Stonington,</i>	Agriculture.
Garwood, Janet,	<i>Augusta,</i>	General Science.
Gibbs, Charles Henry,	<i>Princeton,</i>	Civil Eng'g.
Gilbert, John Philo,	<i>Mt. Vernon,</i>	Natural Science.
Gilkerson, Thomas John,	<i>Urbana,</i>	Agriculture.
Gilmour, Joseph Coleman,	<i>Biggsville,</i>	Civil Eng'g.
Ginzle, Leo Arthur,	<i>Trenton,</i>	Civil Eng'g.
Godeke, Harry Fred,	<i>Olney,</i>	Mechanical Eng'g.
Goodspeed, Wilbur Fisk,	<i>Tuscola,</i>	Agriculture.
Gore, Adolph,	<i>Marion,</i>	General, L. and A.
Grafius, Margaret Elizabeth,	<i>Chicago,</i>	Library, 2nd year.
Gray, Lily, A. B., (<i>Univ. of Chi-</i> <i>cago</i>), 1876,	<i>Chicago,</i>	Library, 1st year.
Greene, Elizabeth Grosvenor, A.		
B., 1904,	<i>Urbana,</i>	Library, 2nd year.
Greene, Hibbard Spencer,	<i>Lisle,</i>	Electrical Eng'g.
Greenwood, Harris Paul,	<i>Edwardsville,</i>	Civil Eng'g.
Hadden, Samuel Cornelius,	<i>Mazon,</i>	Civil Eng'g.
Hale, Arthur Aldrich,	<i>Chicago,</i>	Mechanical Eng'g.
Hammers, Lilian,	<i>Champaign,</i>	General, L. and A.
Hannum, Myrtle Neta,	<i>Decatur,</i>	Mathematics.
Harney, John Matthew,	<i>Joliet,</i>	Chemistry.
Harper, Edith Elizabeth,	<i>Urbana,</i>	Library, 2nd year.
Hayward, Mabel Strickland,	<i>Ottawa,</i>	General, L. and A.
Hazen, Howard Spencer, Jr.,	<i>La Salle,</i>	Architectural Eng'g.
Hegnauer, Leonard, A. B. (<i>Univ.</i> <i>of Kas.</i>), 1900,	<i>Onarga,</i>	Agriculture.
Higinbotham, Pearl,	<i>Champaign</i>	General, L. and A.
Hildebrandt, Herman Carl Martin,	<i>Carpentersville,</i>	General, L. and A.
Hildebrandt, Theophil Henry,	<i>Carpentersville,</i>	Mathematics, L. and A.
Hill, Ida Myrtle,	<i>Champaign,</i>	General, L. and A.
Hillman, Frank William,	<i>Chicago,</i>	Civil Eng'g.
Hinman, Glidden,	<i>Dundee,</i>	Business, L. and A.

Houchens, Josie Batchelor, A. B. (<i>H. Sophie Newcomb Coll.</i>), 1903,	<i>New Orleans, La.,</i> Library, 2nd year.
Howell, Cleves Harrison, Ph. B., (<i>Wooster Univ.</i>) 1901,	<i>Keokuk, Ia.,</i> Civil Eng'g.
Huff, Nolan Hynson,	<i>Rushville,</i> General, L. and A.
Humphrey, Guess, A. B., (<i>Univ.</i> <i>of Neb.</i>), 1902,	<i>Clifton, Kas.,</i> Library, 2nd year.
Hunter, Flora Vimont,	<i>Washington, Ky.,</i> Library, 1st year.
Huntoon, Harry Alexander,	<i>Moline,</i> Mechanical Eng'g.
Huntoon, John Samuels,	<i>Moline,</i> Civil Eng'g.
Jacobs, Manuel Joseph,	<i>Chicago,</i> Civil Eng'g.
Johnson, John Thomas,	<i>Urbana,</i> Agriculture.
Johnstone, Guy Carlyle,	<i>Bloomington,</i> Agriculture.
Kasten, Frederick, William,	<i>Dolton Station,</i> Civil Eng'g.
Keeler, Lawrence Swasey,	<i>Chicago,</i> Civil Eng'g.
Kenyon, Eugene Crouse,	<i>Peoria,</i> Mechanical Eng'g.
Kidder, Mrs. Ida Angeline,	<i>Cedar Rapids, Ia.,</i> Library, 1st year.
Kirkwood, Arthur William,	<i>Chicago,</i> Business, L. and A.
Klein, David,	<i>Chicago,</i> Chemistry.
Kramer, Gustave August,	<i>Streator,</i> General, L. and A.
Krippner, John,	<i>Chicago,</i> Civil Eng'g.
Kuehlcke, Otto,	<i>Davenport, Ia.,</i> Civil Eng'g.
Laidlaw, Elizabeth Sophronia,	<i>Chicago,</i> Library 1st year.
Lanham, Mariam Elizabeth,	<i>Osceola, Ia.,</i> Prep. to Medicine.
Lewis, Lucy Mae,	<i>Pomona, Cal.,</i> Library, 1st year.
Lewis, Russell James,	<i>Denmark, Ia.,</i> Civil Eng'g.
Lonergan, Charles Patrick Au- gustus,	<i>Polo,</i> Civil Eng'g.
Long, Troy Lovell,	<i>Taylorville,</i> General, L. and A.
Lundahl, Bruce Hjalmar,	<i>Gibson City,</i> Mechanical Eng'g.
McCarthy, Estella May,	<i>Moline,</i> General, L. and A.
McDougall, Agnes,	<i>Ottawa,</i> General, L. and A.
McGinley, William,	<i>Mosveaqua,</i> General, L. and A.
McGrath, Sylvester Joseph,	<i>Warrensburg,</i> Chemistry.
McNeill, Roscoe Plant,	<i>Greenville,</i> General, L. and A.
Marquis, Franklin Wales,	<i>Bloomington,</i> Mechanical Eng'g.
Marsh, Wallace Hickling	<i>Marseilles,</i> Architecture.
Martin, William Roy,	<i>Newton, Ia.,</i> Architecture.

Massey, Esther,	<i>Urbana,</i>	General, L. and A.
Mather, Donald Edward,	<i>Plainfield,</i>	Civil Eng'g.
Mather, Rose Margaret,	<i>Plainfield,</i>	General, L. and A.
Matousek, Joseph,	<i>Chicago,</i>	Civil Eng'g.
Maxfield, Leroy Haskell,	<i>Godfrey,</i>	Mechanical Eng'g.
May, David Thorpe,	<i>Prophetstown,</i>	Mechanical Eng'g.
Meharry, George Francis,	<i>Tolono,</i>	General, L. and A.
Meier Ernest Edward	<i>Chicago,</i>	Civil Eng'g.
Meissner, Josephine Augusta,	<i>York, Neb.,</i>	Library, 1st year.
Metzger, Louis Charles Fred- erick,	<i>Belleville,</i>	Civil Eng'g.
Miller, Nellie Augusta,	<i>Urbana,</i>	Household Science.
Montooth, Charles Stuart,	<i>Toulon,</i>	General, L. and A.
Morey, Henry Hiram,	<i>Greenville,</i>	General, L. and A.
Morgan, George Walker,	<i>Urbana,</i>	Civil Eng'g.
Morgan, Ora Sherman,	<i>Hampshire,</i>	General Science.
Morris, Sidney Dealey,	<i>Chicago,</i>	Electrical Eng'g.
Moschel, Louis Conrad,	<i>Morton,</i>	Business, L. and A.
Moss, Haven Harnell,	<i>Urbana,</i>	General, L. and A.
Moss, Mary Frances,	<i>Urbana,</i>	Classical.
Mueller, Walter Herman,	<i>Chicago,</i>	Architectural Eng'g.
Nichols, Emily Lavinia,	<i>Chicago,</i>	Library, 2nd year.
Nuckolls, Charles Morrison,	<i>Urbana,</i>	Mechanical Eng'g.
O'Connell, Charles Slade,	<i>Champaign,</i>	Civil Eng'g.
Olson, Blenda,	<i>Urbana,</i>	English.
Pahmeyer, Fred Oscar,	<i>Decatur,</i>	Mechanical Eng'g.
Parker, Walter Harriman,	<i>Peoria,</i>	Architecture.
Parks, Mrs. Allie V,	<i>Urbana,</i>	General, L. and A.
Pearson, John Winthrop,	<i>Chicago,</i>	Mechanical Eng'g.
Pegelow, Fred George,	<i>Chicago,</i>	Civil Eng'g.
Perry, Alphonso Lorenzo,	<i>Cornell,</i>	Mechanical Eng'g.
Phillips, Grace Darling,	<i>Kansas City, Mo.,</i>	Library, 2nd year.
Pilcher, Lela Gretchen,	<i>New Castle, Ind.,</i>	Gen. Science.
Pinkum, Anna Shaw, B. L., (Univ. of Wis.), 1899,	<i>Eau Claire, Wis.,</i>	Library 2d year.
Purdunn, George Gould,	<i>Marshall,</i>	Mechanical Eng'g.
Randall, Frank Alfred,	<i>Cambridge,</i>	Civil Eng'g.
Rapp, Charles Edward,	<i>Jacksonville,</i>	Civil Eng'g.
Reat, Ruth	<i>Charleston,</i>	Household Science.

Reese, Nelle Wheeler,	<i>Ravenna, O.,</i> Mathematics, L. and A.
Rein, Lester Edward,	<i>Chicago,</i> Municipal Eng'g.
Renner, Edwin Theodore,	<i>Lanark,</i> Civil Eng'g.
Richeson, Virginia Campbell,	<i>E. St. Louis,</i> Household Science.
*Roberts, Ralph Ousley,	<i>Keokuk; Ia.,</i> Architecture.
Roney, William Hanson,	<i>Chicago,</i> Civil Eng'g.
Rothgeb, Wade Hampton,	<i>Wellington,</i> Business, L. and A.
Roy, Howard Meek,	<i>Anna,</i> Civil Eng'g.
Rubey, Harry Kelly,	<i>St. Louis, Mo.,</i> Civil Eng'g.
Sachse, William Gustavus,	<i>Morris,</i> Prep. to Medicine.
Salmer, Clara, A. B.,	<i>Vermilion, S. Dak.,</i> Library, 1st year.
(<i>Univ. of S. Dak.</i>), 1903,	
Samson, George Roy, A. B., 1902,	<i>Urbana,</i> Agriculture.
Sawyer, Fred Scott,	<i>Chicago,</i> Civil Eng'g.
Scherer, Josephine,	<i>Murphysboro,</i> General, L. and A.
Schmidt, Hugo,	<i>Chicago,</i> Civil Eng'g.
Schott, Frederick, Jr.,	<i>Chicago,</i> Architecture.
Schroeder, Charles Ward,	<i>Joliet,</i> Business, L. and A.
Schutt, Alfred George,	<i>Belleville,</i> Civil Eng'g.
Seymour, Claude Henrickson,	<i>Elgin,</i> Civil Eng'g.
Sheldon, Carrie Belle, Ph. B.,	
(<i>Ottawa Univ.</i>), 1901,	<i>Ottawa, Kas.,</i> Library, 2nd year.
Shipman, Andrew Bradt,	<i>De Kalb,</i> Mechanical Eng'g.
Shoemaker, John Earl, A. B.,	
1903,	<i>Charleston,</i> Civil Eng'g.
Sims, Charles Edward,	<i>Lincoln,</i> Civil Eng'g.
Sisler, Della Jarrett,	<i>Emporia, Kas.,</i> Library, 2nd year.
Skelley, Charles Edward,	<i>Champaign,</i> Mechanical Eng'g.
Sloan, Hazel,	<i>Helena, Mont.,</i> Library, 1st year.
Smith, Charles Wesley, A. B.,	
1903,	<i>Lockwood, N. Y.,</i> Library, 2nd year.
Smith, Edwin Raymond,	<i>Champaign,</i> Mathematics, L. and A.
Smith, Fred D,	<i>Alexis,</i> Electrical Eng'g.
Smith, Kenneth Gardner, A. B.,	
(<i>Univ. of Chicago</i>), 1896,	<i>Dixon,</i> Mechanical Eng'g.

*Deceased.

Smith, Valentine,	Urbana,	General, L. and A.
Sommer, Alfred,	Chicago,	Mechanical Eng'g.
Spitler, Wesley Newton,	Mattoon,	Electrical Eng'g.
Sprague, Jennie Edyth, Ph. B., (<i>Ohio State Univ.</i>), 1903,	Millfield, O.,	Library, 1st year.
Stedman, Angeline Jones,	Champaign,	General, L. and A.
Storm, Howard Charles,	Lockport,	General, L. and A.
Sype, George,	Fairbury,	General, L. and A.
Taylor, Ruth Beatrice,	Champaign,	General, L. and A.
Thayer, William Sumner,	Chicago,	Electrical Eng'g.
Thompson, James Arthur,	Layton,	Agriculture.
Tobie, Rev. Willard Nathan,	Urbana,	General, L. and A.
Trams, Albert Francis,	Loda,	English.
Triebel, Albert Fred,	Peoria,	Architectural Eng'g.
Van Meter, Anna Roberta,	Urbana,	Household Science.
Vines, Edgar James,	Hoopeston,	General, L. and A.
Voss, Sophie Mary,	Champaign,	Music.
Wagenseil, Edgar White,	Port Huron, Mich.,	Mechanical Eng'g.
Warder, Laura Belle,	Marion,	General, L. and A.
Warner, William Herbert	Dixon,	Civil Eng'g.
Warnock, Arthur Ray,	Mason City,	General, L. and A.
Watrous, Chris Beach,	Hampshire,	Mechanical Eng'g.
Weilepp, Leila Maude,	Cisco,	Library, 1st year.
Wheeler, Edmund Burke,	Bellflower,	Electrical Eng'g.
White, Hilda Kirke,	St. Joseph, Mo.,	Library, 1st year.
Wilt, Alva Lewis,	Lovington,	General Science.
Winders, Frank Rae,	Urbana,	Electrical Eng'g.
Wray, Harriette,	Winnebago,	General, L. and A.
Wright, Herman Festues,	Vienna,	Agriculture.
Wyeth, Ola May, A. B., (<i>Cor-</i> <i>nel Univ.</i>), 1904,	Charleston,	Library, 1st year.
Yolton, Robert Elgene,	Brownstown,	Civil Eng'g.

JUNIORS

Adams, Leason Heberling,	Taylorville,	Chemical Eng'g.
Allen, Edward Riley,	Pana,	Agriculture.
Allinson, May,	Champaign,	General, L. and A.
Allison, Ira Dent,	Alpha,	Agriculture.
Alverson, Eva Luella,	Champaign,	Latin and Mod. Lang.

Amrine, Thomas Hamer,	<i>Vermont,</i>	Electrical Eng'g.
Andrew, Charles Edward,	<i>Oregon,</i>	Civil Eng'g.
Applegate, Frank G,	<i>Atlanta,</i>	General, L. and A.
Archer, Charley Lehman,	<i>Carmi,</i>	General, L. and A.
Arizpe, Jesus de Valle,	<i>Saltillo, Mex.,</i>	Electrical Eng'g.
Armeling, Henry Richard,	<i>Mason City,</i>	Civil Eng'g.
Atkinson, Helen Marie,	<i>Champaign,</i>	Latin and Mod. Lang.
Augustinus, Paul,	<i>Evanston,</i>	Electrical Eng'g.
Bacon, Lewis Frank,	<i>South Haven, Mich.,</i>	Mechanical Eng'g.
Baird, Grace Jean,	<i>De Kalb,</i>	General Science.
Baker, Eleanor Mary,	<i>Champaign,</i>	General, L. and A.
Bannon, James Leo,	<i>Joliet,</i>	Civil Eng'g.
Banschbach, Litta Celia,	<i>Princeton,</i>	Library, L. and A.
Bard, Jacob William,	<i>Quincy,</i>	Electrical Eng'g.
Barickman, Ralph Elvin,	<i>Streator,</i>	Electrical Eng'g.
Barr, Susan Jessie,	<i>Urbana,</i>	Household Science.
Barto, Philip Stephan,	<i>Champaign,</i>	General, L. and A.
Bates, Robert Paul,	<i>Bloomington,</i>	Civil Eng'g.
Bauer, Effie Lucy,	<i>Champaign,</i>	General, L. and A.
Baughman, John Franklin,	<i>Olney,</i>	Chemistry.
Baxter, Emile Miles,	<i>Nauvoo,</i>	Mechanical Eng'g.
Bear, Fred Gamble,	<i>Farmington,</i>	Civil Eng'g.
Beauford, May Alice,	<i>Oak Park,</i>	Classical.
Bell, Clement Henry,	<i>Pontiac,</i>	Electrical Eng'g.
Bench, Alfred Ritscher,	<i>Galena,</i>	Mechanical Eng'g.
Bennett, Rolland Harold,	<i>Chicago,</i>	Electrical Eng'g.
Bent, Charles Howard,	<i>Chicago,</i>	Mechanical Eng'g.
Bergert, Henry Amos,	<i>Moline,</i>	Electrical Eng'g.
Biedinger, Harry Eugene,	<i>Cincinnati, O.,</i>	Civil Eng'g.
Bond, Claude Hollett,	<i>Geneva, N. Y.,</i>	Electrical Eng'g.
Bond, Lyda,	<i>Charleston,</i>	Household Science.
Boone, Charles Guthrie,	<i>Chrisman,</i>	Mechanical Eng'g.
Bradley, Tirzah Ozilla,	<i>Blue Mound,</i>	General, L. and A.
Brightman, Morgan Holmes,	<i>Elgin,</i>	Electrical Eng'g.
Brooker, Mrs. Nellie Danley, A.		
B., (<i>Northwestern Univ.</i>), 1897,	<i>Urbana,</i>	Architecture.
Brown, Paul Manley,	<i>Tolono,</i>	General, L. and A.
Brown, Roy Hamlin,	<i>Sycamore,</i>	General, L. and A.
Brown, William Edward,	<i>Port Byron,</i>	Architectural Eng'g.

Brownson, Howard Gray,	<i>Centralia,</i>	General, L. and A.
Brush, Daniel Harmon, Jr.,	<i>Manila, P. I.,</i>	Civil Eng'g.
Bryan, Helen Gordon,	<i>Champaign,</i>	General, L. and A.
Bullard, Edwin Elliott,	<i>Springfield,</i>	Electrical Eng'g.
Bumann, Cecil Spencer,	<i>Champaign,</i>	Civil Eng'g.
Bumstead, Frank Melvin,	<i>Dundee,</i>	General, L. and A.
Burkhalter, Ralph Marks,	<i>Peoria,</i>	Civil Eng'g.
Bush, James Ackerman,	<i>Chicago,</i>	Agriculture.
Butzow, Louis James,	<i>St. Joseph,</i>	Electrical Eng'g.
Carey, Alice,	<i>La Grange,</i>	General, L. and A.
Carter, Allen John,	<i>Chicago,</i>	General, L. and A.
Case, Montgomery Babcock,	<i>Peoria,</i>	Civil Eng'g.
Chambers, Ralph Edward,	<i>Sadorus,</i>	Agriculture.
Chapin, George,	<i>Champaign,</i>	Business, L. and A.
Chesnut, Jennette Stewart,	<i>Hartsburg,</i>	General, L. and A.
Christiansen, Johanna Christiana		
Mathea,	<i>Chicago,</i>	General, L. and A.
Clark, John Ruskin,	<i>Carthage,</i>	General, L. and A.
Clark, Lorin, LL. B., 1904,	<i>Homer,</i>	General, L. and A.
Cleary, James Mansfield,	<i>Chicago,</i>	General, L. and A.
Close, George Frederick,	<i>Aledo,</i>	General, L. and A.
Coleman, George Howell,	<i>Chicago,</i>	Prep. to Medicine.
Comstock, Arthur Francis,	<i>Joliet,</i>	Civil Eng'g.
Conard, Sarah Orvilla,	<i>Monticello,</i>	General, L. and A.
Cone, Wilbur Charles,	<i>Loda,</i>	Mechanical Eng'g.
Cook, Louis Phillip,	<i>Quincy,</i>	Electrical Eng'g.
Corrigan, Edward,	<i>New Berlin,</i>	General, L. and A.
Cox, Fred Augustus,	<i>Moline,</i>	Civil Eng'g.
Cox, Irving Hughey,	<i>Mattoon,</i>	Civil Eng'g.
Craig, Jennie Adah,	<i>Champaign,</i>	General, L. and A.
Craig, Stephen James,	<i>Wilmington,</i>	Agriculture.
Cratty, Paul Jones,	<i>Oak Park,</i>	Electrical Eng'g.
Cutler, Asa Bryant,	<i>Rockford,</i>	Municipal Eng'g.
Davison, Margaret White,	<i>Monticello,</i>	Prep. to Medicine.
Deason, Francis Ellery,	<i>Murphysboro,</i>	Agriculture.
Demitz, Charles Henry,	<i>Baltimore, Md.,</i>	Architectural Eng'g.
De Puy, Jessie Maude,	<i>Urbana,</i>	General, L. and A.
De Puy, Orval Carl,	<i>Urbana,</i>	General, L. and A.
Derwent, Everett Foster,	<i>Pecatonica,</i>	Civil Eng'g.

Dewey, Homer Harry,	<i>Henry,</i>	General, L. and A.
Dillon, Fred Paul,	<i>Chicago,</i>	Civil Eng'g.
Dixon, Frank Eugene,	<i>Ambia, Ind.,</i>	Electrical Eng'g.
Donoghue, George Terry,	<i>Chicago,</i>	Civil Eng'g.
Dool, Robert Beatty,	<i>Aledo,</i>	Electrical Eng'g.
Doran, Edwin Beall,	<i>Champaign,</i>	Agriculture.
Dougherty, Floyd Everett,	<i>Fairmount,</i>	Architecture.
Doughty, Ivan Fremont,	<i>Westville,</i>	Civil Eng'g.
Drew, Don John Charles,	<i>Watseka,</i>	Electrical Eng'g.
Dunlap, Albert Menzo,	<i>Savoy,</i>	Prep. to Medicine.
Dysart, John Padden,	<i>Granville,</i>	Agriculture.
Edwards, John Isaac,	<i>Aledo,</i>	Mechanical Eng'g.
Eiserer, Charles Emil,	<i>Chicago,</i>	Mechanical Eng'g.
Emerson, Frederic Hood,	<i>Rockford,</i>	Electrical, Eng'g.
Enger, Melvin Lorenius,	<i>Decorah, Ia.,</i>	Civil Eng'g.
Enger, Norval,	<i>Decorah, Ia.,</i>	Civil Eng'g.
Enlow, Lena,	<i>Chicago,</i>	General, L. and A.
Evans, Robin Mills,	<i>Springfield,</i>	Mechanical Eng'g.
Ewing, Henry Ellsworth,	<i>Arcola,</i>	General Science.
Fairchild, James Albert Leroy,	<i>Muncie, Ind.,</i>	General, L. and A.
Fairfield, Mrs. Mary Peters,	<i>Urbana,</i>	General, L. and A.
Ferry, Leroy Clark,	<i>Warrensburg,</i>	Mechanical Eng'g.
Fischer, Carl Henry,	<i>Carrollton,</i>	Electrical Eng'g.
Fisher, Roy Savage,	<i>Litchfield,</i>	Electrical Eng'g.
Flather, Alice Virginia,	<i>Urbana,</i>	Chemistry.
Flowers, Roy Warner,	<i>Quincy,</i>	Architectural Eng'g.
Franklin, Howard Brace,	<i>Harvey,</i>	Mechanical Eng'g.
Freebern, Walter Holsburg,	<i>Plano,</i>	Prep. to Medicine.
Freeman, Julian Bryant,	<i>Princeton,</i>	Mechanical Eng'g.
Frost, John Henry,	<i>Chicago,</i>	Civil Eng'g.
Fucik, John, Jr.,	<i>Chicago,</i>	Civil Eng'g.
Galloway, William James,	<i>Deerfield,</i>	Mechanical Eng'g.
Gambach, Jacob,	<i>Hecker,</i>	General, L. and A.
Gardner, Bradley Charles,	<i>Chicago,</i>	Chemistry.
Gill, Frederick William,	<i>Belvidere,</i>	Chemistry.
Glass, John Burr,	<i>Taylorville,</i>	Mechanical Eng'g.
Graff, Elizabeth,	<i>Champaign,</i>	General, L. and A.
Graham, Douglas Basil Adair,	<i>Riverside,</i>	Municipal Eng'g.
Grandpré, Ambrose Goulet,	<i>Chicago,</i>	Civil Eng'g.
Gregory, Walter Herbert,	<i>Mosweaqua,</i>	General, L. and A.

Gustafson, John Christopher,	<i>Chicago,</i>	Architectural Eng'g.
Haase, Herbert Emil,	<i>Oak Park,</i>	Municipal Eng'g.
Hachmeister, Henry William,	<i>Chicago,</i>	Chemical Eng'g.
Hall, Ellis Bernard,	<i>Urbana,</i>	Chemistry.
Hall, Grace Evalyn,	<i>Urbana,</i>	General, L. and A.
Hamm, Ira Lewis,	<i>Champaign,</i>	Agriculture.
Hanstein, Carl Menelaus,	<i>Chicago,</i>	Mechanical Eng'g.
Harding, Albert Austin,	<i>Paris,</i>	Municipal Eng'g.
Harmon, Ivan Guy,	<i>Flora,</i>	Civil Eng'g.
Harris, Chester Arthur,	<i>Lena,</i>	Prep. to Medicine.
Hawthorne, Leo,	<i>Oregon,</i>	Mechanical Eng'g.
Henderson, Charles Elliott,	<i>Champaign,</i>	Civil Eng'g.
Henning, Warren Kenyon,	<i>Plano,</i>	Mechanical Eng'g.
Hewes, Clarence Avise,	<i>Quincy,</i>	Civil Eng'g.
Hewes, Floyd Sinnock,	<i>Quincy,</i>	Civil Eng'g.
Higgins, Allen Leet,	<i>Elmwood,</i>	Agriculture.
Higgins, Daniel Franklin,	<i>Joliet,</i>	Civil Eng'g.
Hoff, Leigh Patridge,	<i>Chicago Heights,</i>	Electrical Eng'g.
Hoffman, Frank Gordon,	<i>Ramsey,</i>	Civil Eng'g.
Holl, Charles Ludwig,	<i>Streator,</i>	Mechanical Eng'g.
Hook, Henry Hudson,	<i>Vienna,</i>	Mechanical Eng'g.
Hopkins, Ruby Clar,	<i>Granville,</i>	General Science.
Howe, Paul Edward,	<i>Urbana,</i>	Chemical Eng'g.
Hubbart, Guy,	<i>Philo,</i>	Business, L. and A.
Huckins, Alvin Elmont,	<i>Chicago,</i>	Mechanical Eng'g.
Hughes, Charles Herbert,	<i>Fairmount,</i>	Mechanical Eng'g.
Hughes, Harold De Motte,	<i>Antioch,</i>	Agriculture.
Hunt, E Glenne,	<i>Dana, Ind.,</i>	Library, L. and A.
Jackson, Litta Dustin,	<i>Clinton, Ia.,</i>	General, L. and A.
Jacobsen, Noah Henning,	<i>Niantic,</i>	Civil Eng'g.
James, Hermann Gerlach,	<i>Urbana,</i>	General, L. and A.
James, Leonard Vaughan,	<i>Amboy,</i>	Electrical Eng'g.
Johnson, Alice Sarah,	<i>Champaign,</i>	Library, L. and A.
Johnson, George Thompson,	<i>Champaign,</i>	Prep. to Medicine.
Johnson, Riley Oren,	<i>Hindsboro,</i>	General Science.
Jones, Truman N,	<i>Aurora,</i>	Mechanical Eng'g.
Jordan, John Garfield,	<i>Savoy,</i>	Electrical Eng'g.
Jordan, Oscar Joseph,	<i>Pullman,</i>	General, L. and A.
Kanne, Walter John,	<i>Waterville, Minn.,</i>	Mechanical Eng'g.
Kays, Marion Reed,	<i>Phoenix, Ariz.,</i>	Civil Eng'g.

Kays, Victor C,	<i>Magnolia,</i> General Science
Kelley, Grace Osgood,	<i>Muskegon, Mich.,</i>
	General, L. and A.
Kemp, Jacob Garrett,	<i>Baltimore, Md.,</i> Electrical Eng'g.
Kilpatrick, Mabel,	<i>Little Rock, Ark.,</i>
	General, L. and A.
Kimball, Robert Haskell,	<i>Rockford,</i> Business, L. and A.
King, Paul Wheelock,	<i>Payson,</i> Civil Eng'g.
Kirk, Todd,	<i>Kirkville, Mo.,</i> Civil Eng'g.
Kirley, John Thomas,	<i>Kewanee,</i> Civil Eng'g.
Kline, William Gordon,	<i>Amboy,</i> General, L. and A.
Knorr, Louis Solliday,	<i>Chicago,</i> Municipal Eng'g.
Kohout, George Anton,	<i>Chicago,</i> Electrical Eng'g.
Kungle, Roy Delos,	<i>Peoria,</i> Mechanical Eng'g.
Lapham, Ina Oliva,	<i>Champaign,</i> General, L. and A.
Larson, Charles Andrew,	<i>Paxton,</i> Mechanical Eng'g.
Latzer, Lenore Lydia,	<i>Highland,</i> General Science.
Lenke, Edward Henry,	<i>Chicago,</i> General, L. and A.
Leonard, Edith,	<i>Urbana,</i> Architecture.
Lewis, Burt A,	<i>Osage, Ia.,</i> Architectural Eng'g.
Little, Charles Edwin,	<i>Sycamore,</i> Mechanical Eng'g.
Llewellyn, Clarinne,	<i>La Grange,</i> General Science.
Llewellyn, Ralph Corson,	<i>La Grange,</i> Architectural Eng'g.
Logan, Chester R,	<i>Urbana,</i> Civil Eng'g.
Logan, Clarence Chester,	<i>Flora,</i> Agriculture.
Logan, Winnie Alice,	<i>Edinburg,</i> Household Science.
Long, Roy Harold,	<i>Lexington,</i> Agriculture.
Lucas, Rena Avis, B. L. S., 1904,	<i>Urbana,</i> General, L. and A.
McCarty, Laurence Justin,	<i>Sioux City, Ia.,</i> Architecture.
McClure, Clyde Hull,	<i>Maywood,</i> Chemical Eng'g.
McCoy, Joseph,	<i>Lafayette, Ind.,</i> Architecture.
McCully, Clinton Thomas,	<i>Champaign,</i> General, L. and A.
McIntire, James Franklin,	<i>Farmer City,</i> Architecture.
McIntire, Mamie Minerva,	<i>Sparta,</i> General, L. and A.
McKelvey, Frank Hotchkiss,	<i>Sparta,</i> Agriculture.
Mann, Kate Bonnell,	<i>Muskegon, Mich.,</i>
	General, L. and A.
Manspeaker, Berta Harding,	<i>Champaign,</i> General, L. and A.
Marshall, Reuben S,	<i>Mt. Morris,</i> Electrical Eng'g.
Marvel, John Everett,	<i>Waynesville,</i> Prep. to Medicine.
Mather, Emery Thomas,	<i>Joliet,</i> Agriculture.

Maxey, Mima Agnes,	<i>Carlyle,</i>	General, L. and A.
Meadows, David Stanley,	<i>Chicago,</i>	Civil Eng'g.
Meharry, Edwin Thomas,	<i>Tolono,</i>	Agriculture.
Mehren, Edward John, A. B. (<i>St. Ignatius' Coll.</i>), 1901,	<i>Chicago,</i>	Civil Eng'g.
Melvin, Leon Russell,	<i>Greenfield,</i>	Agriculture.
Miller, Daisy Mary,	<i>Urbana,</i>	Household Science.
Miller, Donald S,	<i>Geneva,</i>	Chemical Eng'g.
Miller, John Glenn,	<i>Galesburg,</i>	Architectural Eng'g.
Miner, J Howard,	<i>Adair,</i>	Agriculture.
Mitchell, Roy Craig,	<i>Fairfield, Ia.,</i>	Architectural Eng'g.
Moore, Francis Guy,	<i>Bloomington,</i>	Mechanical Eng'g.
Morgan, Horace Healy,	<i>Loda,</i>	Mechanical Eng'g.
Mosiman, Levi,	<i>Morton,</i>	Electrical Eng'g.
Mulberry, Grace Pearl,	<i>Taylorville,</i>	General, L. and A.
Murchison, Rob Roy,	<i>Kewanee,</i>	Civil Eng'g.
Myers, Henry Beck,	<i>Springfield,</i>	Civil Eng'g.
Neu, Clarence Leonard,	<i>Chicago,</i>	General, L. and A.
Nichol, Agnes Elaine,	<i>Urbana,</i>	Library, L. and A.
Nichols, Marvin Arthur,	<i>Yorkville,</i>	General Science.
North, Howard Peter,	<i>El Paso,</i>	Civil Eng'g.
Nutting, Harry George Dallas,	<i>Rock Island,</i>	Mechanical Eng'g.
Oathout, Charles Hubert,	<i>Urbana,</i>	Agriculture.
Oldefest, Edward George,	<i>Moline,</i>	Architecture.
Page, Carlos Merriam,	<i>West Hope, N. Dak.,</i>	Electrical Eng'g.
Palmer, Ann Adelia,	<i>Monticello,</i>	General, L. and A.
Parcel, John Ira, A. B. (<i>Westfield Coll.</i>), 1903,	<i>Westfield,</i>	Civil Eng'g.
Parr, Rosalie Mary,	<i>Mapleton,</i>	General, L. and A.
Paton, Walter Coffman,	<i>Kansas City, Kas.,</i>	Mechanical Eng'g.
Peebles, Thomas,	<i>Naperville,</i>	Mechanical Eng'g.
Pepper, Curtis Gordon,	<i>Champaign,</i>	Mechanical Eng'g.
Percival, Avis Hortense,	<i>Urbana,</i>	General, L. and A.
Phipps, Thomas Elmer,	<i>Janesville,</i>	Civil Eng'g.
Poirot, Aloys Phillip,	<i>Belleville,</i>	Civil Eng'g.
Pollard, Willard Lacy,	<i>Monmouth,</i>	Mechanical Eng'g.
Pope, George Samuel,	<i>Kane,</i>	Electrical Eng'g.
Porter, James Albert,	<i>Arcola,</i>	General, L. and A.
Porterfield, N Raymond,	<i>Fairmount,</i>	Civil Eng'g.

Post, Royal Elmer,	<i>Rochester, N. Y.,</i>	Civil Eng'g.
Pray, Ralph Marble,	<i>Chicago,</i>	Business, L. and A.
Putting, Oscar John,	<i>Springfield,</i>	General, L. and A.
Ray, Howard Alden,	<i>Libertyville,</i>	General, L. and A.
Reed, Oliver Roy,	<i>Chicago,</i>	Civil Eng'g.
Regan, Ralph Howard,	<i>Chicago,</i>	Mechanical Eng'g.
Reynolds, Frank Howard,	<i>Moline,</i>	Civil Eng'g.
Rich, Charles Clyde,	<i>Washington,</i>	Architecture.
Roberts, Kathleen Alice,	<i>Champaign,</i>	General, L. and A.
Roberts, Louis Paul,	<i>Lacon,</i>	Mechanical Eng'g.
Robinson, Candace Ione,	<i>Granville,</i>	General, L. and A.
Robinson, Harrison Franklin,	<i>Mattoon,</i>	Architecture.
Robinson, Ward Reid,	<i>Springfield,</i>	Civil Eng'g.
Rodriguez, Roberto Segundo,	<i>Saltillo, Mex.,</i>	Architectural Eng'g.
Rogers, Edith,	<i>Windsor,</i>	General, L. and A.
Rohkam, Henry,	<i>Chicago,</i>	Architecture.
Roy, Archie Bertrand,	<i>Harvey,</i>	Mechanical Eng'g.
Rump, Charlie Albert,	<i>Quincy,</i>	Civil Eng'g.
Rutledge, Bertha,	<i>Le Roy,</i>	General, L. and A.
Saathoff, George Webster,	<i>Litchfield,</i>	Electrical Eng'g.
Sanford, Edwin William,	<i>Moline,</i>	Civil Eng'g.
Schmahl, Myron Roy,	<i>Aurora,</i>	Electrical Eng'g.
Schoeller, Julius Ernest,	<i>Chicago,</i>	Civil Eng'g.
Seavert, Norman Edward,	<i>Chicago,</i>	Civil Eng'g.
Shilton, Paul Adyman,	<i>Kewanee,</i>	Business, L. and A.
Shinn, William Ricketts,	<i>Mattoon,</i>	Agriculture.
Sinclair, Lawrence Edwin,	<i>Ashland,</i>	Agriculture.
Slater, Willis Appleford,	<i>Polo,</i>	Municipal Eng'g.
Slocum, Fielder,	<i>Urbana,</i>	Mechanical Eng'g.
Smith, Alfred Glaze,	<i>Hope,</i>	Agriculture.
Smith, Russell Nellis,	<i>Abingdon,</i>	General, L. and A.
Snow, Louis Frederick,	<i>Chadwick,</i>	Chemistry.
Spitler, John Clyde,	<i>Montrose,</i>	Agriculture.
Stanley, Arba Porter,	<i>Ashtabula, O,</i>	Mechanical Eng'g.
Stanley, Edgar Albert,	<i>Ashtabula, O.,</i>	Architecture.
Stevens, Sabra Elizabeth,	<i>Mahomet,</i>	General, L. and A.
Stookey, Marshall Childs,	<i>Harristown,</i>	Civil Eng'g.
Strauch, Oswald Frederick,	<i>Chadwick,</i>	Mechanical Eng'g.
Strawn, Myrtle,	<i>Albion,</i>	General, L. and A.
Stromberg, Julian Willis,	<i>Chicago,</i>	Civil Eng'g.

Strong, Ralph Stillman,	<i>Chicago,</i>	Mechanical Eng'g.
Suttle, Clifford Bradley,	<i>Kenney,</i>	Civil Eng'g.
Swanberg, Helena May,	<i>Reddick,</i>	Mathematics.
Swart, Harmon Veeder,	<i>Kewanee,</i>	Mechanical Eng'g.
Thomas, Moses Edgar,	<i>Homer,</i>	Civil Eng'g.
Thompson, Estelle,	<i>Findlay,</i>	General, L. and A.
Tomlinson, Bennie,	<i>Champaign,</i>	General, L. and A.
Toops, George Noble,	<i>Champaign,</i>	Civil Eng'g.
Towle, Almon Ira,	<i>Peoria,</i>	Mechanical Eng'g.
Townsend, Robert David,	<i>Chicago,</i>	Mechanical Eng'g.
Trego, Walter,	<i>Hoopeston,</i>	Agriculture.
Turell, Vera,	<i>Champaign,</i>	General, L. and A.
Verran, Laura Ellen,	<i>Urbana,</i>	Library, L. and A.
Waddell, James Vance,	<i>Taylorville,</i>	Civil Eng'g.
Waldo, Karl Douglas	<i>Rockford,</i>	General, L. and A.
Walsh, Edward Rodney,	<i>Elgin,</i>	Civil Eng'g.
Wamsley, Mabel,	<i>Mattoon,</i>	General, L. and A.
Warder, Walter Bain,	<i>Cairo,</i>	General, L. and A.
Warne, Walter Evans,	<i>Delavan,</i>	Electrical Eng'g.
Washburn, Charles Alva,	<i>Fairmount,</i>	Mechanical Eng'g.
Watkins, Oscar S,	<i>Danville,</i>	Chemistry.
Weaver, Herbert Joseph,	<i>Wheaton,</i>	Electrical Eng'g.
Webb, Anna Van Deren,	<i>Charleston,</i>	General, L. and A.
Webster, Samuel Harvey, A. B.		
(<i>Waynesburg Coll.</i>), 1893,	<i>Rutan, Pa.,</i>	Civil Eng'g.
Wells, Reginald Ellis,	<i>Champaign,</i>	Mechanical Eng'g.
Wheeler, Mary Margaret,	<i>Grant Park,</i>	Prep. to Medicine.
Whipple, Robert Hoadley,	<i>Rockford,</i>	Civil Eng'g.
White, Mahala Jane,	<i>Charleston,</i>	General, L. and A.
Whitten, Charles William,	<i>Urbana,</i>	General Science.
Wiemer, Otto,	<i>Carrollton,</i>	Electrical Eng'g.
Wilkinson, Laurance Egar,	<i>Champaign,</i>	Architecture.
Williams, Anna Walter,	<i>Urbana,</i>	General, L. and A.
Williams, Clement Clarence,	<i>Bànnèr,</i>	Civil Eng'g.
Williams, Djalma Downey,	<i>Clinton,</i>	Civil Eng'g.
Williams, Lucy Parke,	<i>Bloomington,</i>	Library, 1st year.
Wise, Leonard E,	<i>Cerro Gordo,</i>	Agriculture.
Wood, Lewis Hungerford,	<i>Oak Park,</i>	Mechanical Eng'g.
Woodin, Earle Belmont,	<i>St. Joseph,</i>	Civil Eng'g.
Woolman, Xenia May,	<i>Urbana,</i>	General, L. and A.

Wooster, Lawrence Fisher,	<i>Litchfield,</i>	Electrical Eng'g.
Young, Dwayne Glover,	<i>Lewistown,</i>	Electrical Eng'g.

SOPHOMORES

Adams, Edwin Bert,	<i>Crete,</i>	Electrical Eng'g.
Allen, Fred Eaton,	<i>Delavan,</i>	Agriculture.
Alsip, Albert A,	<i>Chicago,</i>	Mechanical Eng'g.
Alverson, Grace Margaret,	<i>Champaign,</i>	Music.
Anderson, Burt Thompson,	<i>Galesburg,</i>	Electrical Eng'g.
Arbuckle, Philip Heckman,	<i>Kingston,</i>	General, L. and A.
Archer, Arthur Ward,	<i>Little Rock, Ark.,</i>	Architecture.
Argraves, Arlow J,	<i>Sterling,</i>	Civil Eng'g.
Armstrong, Jessie Eva,	<i>Champaign,</i>	General, L. and A.
Atkinson, Harry James,	<i>Joliet,</i>	General Science.
Aumer, Joseph Paul,	<i>Peoria,</i>	Chemistry.
Austin, Clem C,	<i>Streator,</i>	General Science.
Awsumb, George,	<i>Eau Claire, Wis.,</i>	Architecture.
Bagby, Francis Cyrus,	<i>Rushville,</i>	Civil Eng'g.
Baker, Orrin Hugh,	<i>Chicago,</i>	Mechanical Eng'g.
Baker, Ray Luzerne,	<i>Champaign,</i>	Mechanical Eng'g.
Baldwin, Jessie Emma,	<i>Ottawa,</i>	General Science.
Ball, John Dudley,	<i>Pontiac,</i>	Mechanical Eng'g.
Ballantyne, George Horton,	<i>Burlington, Ia.,</i>	Civil Eng'g.
Ballou, Mary Ellen,	<i>Wheaton,</i>	General, L. and A.
Bannon, Winifred Agnes,	<i>Joliet,</i>	General, L. and A.
Barber, Harry Haughey,	<i>Freeport,</i>	Mechanical Eng'g.
Barlow, Mildred Lucile,	<i>Streator,</i>	General, L. and A.
Barton, Walter Edmund,	<i>Nokomis,</i>	Mechanical Eng'g.
Bear, Arthur Linn,	<i>Welch, I. T.,</i>	Civil Eng'g.
Bear, Paul Carlton,	<i>Monticello,</i>	General, L. and A.
Beardsley, Eleanor Mahan,	<i>Kansas City, Mo.,</i>	General, L. and A.
Beck, Peter James,	<i>Pontiac,</i>	General, L. and A.
Beckemeyer, Oscar William	<i>Buxton,</i>	Business, L. and A.
Beebe, Wilma Esther,	<i>Kankakee,</i>	General, L. and A.
Beinlich, Bernhard August,	<i>Barrington,</i>	General, L. and A.
Benjamin, Fred Parker,	<i>Watseka,</i>	General, L. and A.
Bennett, Arthur Norton,	<i>Chicago,</i>	Chemical Eng'g.
Bethel, Charles Hugh,	<i>Plainfield,</i>	Electrical Eng'g.
Beyer, George Frederick,	<i>Cullom,</i>	Chemical Eng'g.

Bigelow, Janet Victoria,	<i>Galva,</i>	General, L. and A.
Billings, Walter Emerson,	<i>Geneseo,</i>	Mechanical Eng'g.
Black, William,	<i>Mendota,</i>	Mechanical Eng'g.
Block, Walter Robert,	<i>Champaign,</i>	Agriculture.
Bodwell, Frank Lyman,	<i>Methuen, Mass.,</i>	Civil Eng'g.
Bolin, Willie Kineson,	<i>Sullivan,</i>	Agriculture.
Bond, Ethel,	<i>Champaign,</i>	General, L. and A.
Boon, Hugh Thomas,	<i>Urbana,</i>	Agriculture.
Borden, George William,	<i>Paris,</i>	Civil Eng'g.
Born, Ora Littlefield,	<i>Champaign,</i>	General, L. and A.
Bowen, Ai Pine,	<i>Ottawa,</i>	Agriculture.
Boyer, Mabel Blanche,	<i>Bloomington,</i>	Music.
Bradley, John Jay,	<i>Chicago,</i>	Electrical Eng'g.
Branch, Nellie Uree,	<i>Champaign,</i>	General, L. and A.
Brawner, William Henry,	<i>Delavan,</i>	General Science.
Brearley, Walter Edward,	<i>Rockford,</i>	Agriculture.
Brewer, William Emery,	<i>Urbana,</i>	Civil Eng'g.
Brokaw, Eugene Caldwell,	<i>Sheldon,</i>	Civil Eng'g.
Bronson, George Earl,	<i>Chicago,</i>	Civil Eng'g.
Brooks, John Harrison,	<i>Casey,</i>	Mechanical Eng'g.
Brooks, Richard Abner,	<i>Saunemin,</i>	Electrical Eng'g.
Brown, Arthur Charles,	<i>Champaign,</i>	Chemistry.
Brown, Benjamin Ross,	<i>St. Louis, Mo.,</i>	Civil Eng'g.
Brown, Earl Clarence,	<i>Charleston,</i>	Civil Eng'g.
Brown, Maudelle Tanner,	<i>St. Louis, Mo.,</i>	General, L. and A.
Brownson, Winnina Ella,	<i>Centralia,</i>	General, L. and A.
Burke, James Joseph,	<i>Springfield,</i>	Electrical Eng'g.
Burns, Deane,	<i>Macomb,</i>	Chemical Eng'g.
Burroughs, Wilbur Gordon,	<i>Edwardsville,</i>	Civil Eng'g.
Busey, Carolyn Elizabeth,	<i>Urbana,</i>	Household Science.
Bushnell, Howard Blaine,	<i>Urbana,</i>	Civil Eng'g.
Button, Harry Slife,	<i>Milford,</i>	Electrical Eng'g.
Buxton, Edwin Walker,	<i>Jacksonville,</i>	Civil Eng'g.
Caldwell, Harry Lind,	<i>Chicago Heights,</i>	Electrical Eng'g.
Caldwell, Will Carleton,	<i>Monticello,</i>	Architecture.
Calloway, Russell Thornhill,	<i>Taylorville,</i>	Electrical Eng'g.
Casey, Augustus Bacon,	<i>Chicago,</i>	Civil Eng'g.
Cass, Sherman,	<i>Cerro Gordo,</i>	General Science.
Casteel, Mabel Estelle,	<i>Danville,</i>	General, L. and A.
Castle, Frederick Boyd,	<i>Quincy,</i>	Mechanical Eng'g.

Cermak, Jerome,	<i>Chicago,</i>	Civil Eng'g.
Chapin, Mae,	<i>Champaign,</i>	General, L. and A.
Clark, Albert Barnes, Jr.,	<i>Honolulu, H. I.,</i>	Civil Eng'g.
Clark, John Daniel,	<i>Freeport,</i>	Mechanical Eng'g.
Clingan, Dennis Albert,	<i>Georgetown,</i>	General, L. and A.
Coffey, Walter Castillia,	<i>Rugby, Ind.,</i>	Agriculture.
Collins, Stephen William,	<i>Rock Island,</i>	Civil Eng'g.
Connard, Curtis Earl,	<i>Decatur,</i>	Electrical Eng'g.
Cook, Pansy Elizabeth,	<i>Urbana,</i>	General, L. and A.
Costigan, James Edward Sylves- ter,	<i>Carbondale,</i>	Civil Eng'g.
Cox, James Francis,	<i>Urbana,</i>	Prep. to Medicine.
Craig, John Henry,	<i>Lewistown,</i>	Agriculture.
Cromer, Alba Cornelious Honey- well,	<i>Hoopeston,</i>	Agriculture.
Culver, Orlando Clark,	<i>Blue Rock, O.,</i>	General, L. and A.
Curtiss, Albert Root,	<i>Champaign,</i>	Mechanical Eng'g.
Dailey, John Andrew,	<i>Rock City,</i>	Civil Eng'g.
Danely, Paul,	<i>Urbana,</i>	Agriculture.
Davidson, Dora,	<i>Sullivan,</i>	General, L. and A.
Davis, John June,	<i>Centralia,</i>	General Science.
Davis, Nell Sarella McMillen,	<i>Farmer City,</i>	General, L. and A.
Davis, Ralph Richard,	<i>Centralia,</i>	Business, L. and A.
Davison, Anna Mary,	<i>Monticello,</i>	Music.
De Witt, Louise Elizabeth,	<i>La Grange,</i>	General, L. and A.
Dick, Carl Rankin,	<i>Bloomington,</i>	Architectural Eng'g.
Disosway, Mark Deems,	<i>Sheldon,</i>	Electrical Eng'g.
Dodd, Townsend Foster,	<i>Anna,</i>	Electrical Eng'g.
Dolan, Charles Mark,	<i>Ohio,</i>	General, L. and A.
Donaldson, Robert Stanley,	<i>Joliet,</i>	Civil Eng'g.
Donnersberger, Frank Joseph,	<i>Chicago,</i>	Civil Eng'g.
Drew, Lynn Amos,	<i>Watseka,</i>	Agriculture.
Dunn, Harold Houghton,	<i>Moline,</i>	Electrical Eng'g.
Durfee, John Henry,	<i>Urbana,</i>	Electrical Eng'g.
Eaton, Helen Mary,	<i>Tyler, Tex.,</i>	General, L. and A.
Eberspacher, Jacob Christian,	<i>Pana,</i>	Business, L. and A.
Edmunds, Daniel Austin,	<i>Gilman,</i>	Mechanical Eng'g.
Egy, Willard Leo,	<i>Urbana,</i>	Electrical Eng'g.
Elliott, Hiram Washburn,	<i>Peoria,</i>	Civil Eng'g.
English, Jesse Thomas,	<i>Isabel,</i>	Civil Eng'g.

Ervin, John Frank,	Cutler,	Mechanical Eng'g.
Evans, Edwin Rawden,	Warren,	Mechanical Eng'g.
Everhart, Leon Ulysses,	Urbana,	General, L. and A.
Everhart, William,	Sherman, Tex.,	Civil Eng'g.
Everhart, Charles Arthur,	McLeansboro,	Civil Eng'g.
Fargo, Roy Newton,	Streator,	Electrical Eng'g.
Farrar, Roscoe,	Mattoon,	Agriculture.
Feind, Frances Marguerite,	Chicago Heights,	Library, L. and A.
Fishback, William Murphy,	Marshall,	General, L. and A.
Ford, William Sidney,	Tonica,	Chemical Eng'g.
Foreman, Chester Alva,	Pittsfield,	Civil Eng'g.
Foster, Orrington Cyrenius, Jr.,	Chicago,	Mechanical Eng'g.
Freeman, Perry John,	Georgesville, O.,	Mechan'l Eng'g.
Fricke, Herman Henry,	Sparta,	Mechanical Eng'g.
Friend, Robert Owen,	Evanston,	Electrical Eng'g.
Froom, Albert Nellis,	Chicago,	Agriculture.
Frye, Frederick William,	Aberdeen, Miss.,	Civil Eng'g.
Galhuly, Stanley Worcester,	White Hall,	Civil Eng'g.
Gardner, Harry Clifton,	Viola,	Electrical Eng'g.
Garwood, Mabel Clare,	Augusta,	General, L. and A.
Gentsch, Wilhelmina Holly,	New Philadelphia, O.,	General, L. and A.
Gephard, Earl Benjamin,	Mendota,	Civil Eng'g.
Gibbs, Forrest Linn,	Princeton,	Architecture.
Gilchrist, John Weir,	Davenport, Ia.,	Electrical Eng'g.
Gilkerson, Portia Eunice,	Urbana,	Household Science.
Gill, Thomas Edward,	Pecatonica,	General, L. and A.
Gladden, Bertha,	Urbana,	General, L. and A.
Glenn, Elenor Mae,	Champaign,	General, L. and A.
Golden, Charles Dunning,	Chicago,	Civil Eng'g.
Gonzalez, Arturo,	Sacramento, Coahuila, Mex.,	Architectural Eng'g.
Good, Verna Mae,	Neoga,	General, L. and A.
Goodman, Ernest Albert,	Sadorus,	Mechanical Eng'g.
Gordley, William Thomas,	Virginia,	General, L. and A.
Graham, Donald,	Noblesville, Ind.,	Architecture.
Grauten, Sylvester Henry,	Chicago,	Mechanical Eng'g.
Greear, Sidney,	Anna,	Civil Eng'g.
Green, Bessie Rose,	Ivesdale,	General Science.

Green, Harry L,	<i>Rockford,</i>	Mechanical Eng'g.
Greenleaf, Moses,	<i>Jacksonville,</i>	Agriculture.
Greenman, Margaret Grace,	<i>Champaign,</i>	Household Science.
Gregory, Carl Earl,	<i>Elgin,</i>	Business, L. and A.
Grierson, Walter Gay,	<i>Morrison,</i>	Architectural Eng'g.
Grigsby, Harry Davett,	<i>Peoria,</i>	Chemistry.
Gross, Alfred Otto,	<i>Atwood,</i>	Prep. to Medicine.
Groves, James Clair,	<i>Dana, Ind.,</i>	Civil Eng'g.
Gulick, Byron Allen,	<i>Champaign,</i>	Civil Eng'g.
Gunn, Alexander Hunter,	<i>Evanston,</i>	Mechanical Eng'g.
Gunther, Arthur H,	<i>Chicago,</i>	Mechanical Eng'g.
Gustafson, Axel Ferdinand,	<i>Aledo,</i>	Agriculture.
Gwinn, Alta,	<i>Urbana,</i>	General, L. and A.
Hachmeister, Geo. John Ernest,	<i>Chicago,</i>	Civil Eng'g.
Hagan, Michael Edward,	<i>Champaign,</i>	Electrical Eng'g.
Hake, Harry Gray,	<i>Barry,</i>	Electrical Eng'g.
Hall, Frederic Charles,	<i>Buffalo,</i>	Civil Eng'g.
Hall, Janet Alletta,	<i>Danville,</i>	Prep. to Medicine.
Hanke, Frederick Edward,	<i>Harvey,</i>	Mechanical Eng'g.
Hanna, Roberta Louise,	<i>Oak Park,</i>	Household Science.
Hansen, Klaus Lobek,	<i>Chicago,</i>	Electrical Eng'g.
Harnit, Joseph Milton,	<i>Ludlow,</i>	Electrical Eng'g.
Harper, Bertha May,	<i>Urbana,</i>	Household Science
Harper, Homer Williamson,	<i>Urbana,</i>	Architecture.
Harris, Estelle,	<i>Modesto,</i>	Library, L. and A.
Harvey, Bessie Maye,	<i>Urbana,</i>	General, L. and A.
Haungs, Howard Charles,	<i>Peoria,</i>	Civil Eng'g.
Hays, Howard H,	<i>Metropolis,</i>	General, L. and A.
Heaney, Arthur Noble,	<i>Quincy,</i>	Civil Eng'g.
Hellmann, Carl August,	<i>Chicago,</i>	Electrical Eng'g.
Helm, Roy Raymond,	<i>Metropolis,</i>	General, L. and A.
Hepburn, Nelson William,	<i>Genoa,</i>	Agriculture.
Herman, George Bendick,	<i>Manitowoc, Wis.,</i>	Architectural Eng'g.
Herrick, Hope,	<i>Farmer City,</i>	General, L. and A.
Hill, Mary Bluebell,	<i>Champaign,</i>	Architecture.
Hoff, Charles Edward,	<i>Havana,</i>	Civil Eng'g.
Hollister, Vernon Lee,	<i>Oak Park,</i>	Electrical Eng'g.
Hook, Charles Alfred,	<i>Vienna,</i>	Mechanical Eng'g.
Howe, Alice,	<i>Urbana,</i>	General, L. and A.

Howell, Leslie Dillon,	<i>Ipava,</i>	Architecture.
Howser, Edith Beryl,	<i>Urbana,</i>	Music.
Hubbart, Gurth Searle,	<i>Champaign,</i>	Business, L. and A.
Hughes, Anna Raphael,	<i>Champaign,</i>	Music.
Humphreys, Harry Paul,	<i>Atkinson,</i>	Mechanical Eng'g.
Hunt, Jasper Newton, Jr.,	<i>Chicago,</i>	Chemistry.
Huse, Louise Marie,	<i>Mason City,</i>	General, L. and A.
Hutchin, Claire Elwood,	<i>Decatur,</i>	General, L. and A.
Ingham, George Frost,	<i>Kewanee,</i>	Civil Eng'g.
Jacob, Ernst Otto,	<i>Quincy,</i>	Mechanical Eng'g.
James, Carl,	<i>Pittsfield,</i>	Civil Eng'g.
Jensen, Joseph Norman,	<i>Chicago,</i>	Civil Eng'g.
Jensen, Trygve,	<i>Christiania, Norway,</i>	Electrical Eng'g.
Jervis, Katherine Belle,	<i>Champaign,</i>	General, L. and A.
Jessup, Richard Dale,	<i>Chicago,</i>	Mechanical Eng'g.
Johnson, Lotta Loofbourrow,	<i>Newton,</i>	General, L. and A.
Johnson, William Chance,	<i>Champaign,</i>	Civil Eng'g.
Johnston, Ernest Hungerford,	<i>Chicago,</i>	Electrical Eng'g.
Jones, Horace Norman, Jr.,	<i>Batavia,</i>	Mechanical Eng'g.
Jones, Sidney Francis,	<i>Washington, D. C.,</i>	General, L. and A.
Kammer, Frank James,	<i>Scales Mound,</i>	Civil Eng'g.
Kammerman, John Oscar,	<i>Joliet,</i>	Electrical Eng'g.
Keil, Edwin Louis,	<i>Beardstown,</i>	General, L. and A.
Kelley, Truman Lee,	<i>Muskegon, Mich.,</i>	Electrical Eng'g.
Kendall, Myron Avery,	<i>Aurora,</i>	Mechanical Eng'g.
Kerch, Walter Washington,	<i>Freeport,</i>	Civil Eng'g.
Kerr, Josephine,	<i>Urbana,</i>	Household Science.
Kidder, Albert Franklin,	<i>Farmington,</i>	Agriculture.
Kinsey, Leon Browning,	<i>Mackinaw,</i>	Civil Eng'g.
Kirkpatrick, John Wilson,	<i>Urbana,</i>	Prep. to Medicine.
Knapp, Willard Alfred,	<i>Farmer City,</i>	Civil Eng'g.
Knappenberger, George Emmett,	<i>Macomb,</i>	Prep. to Medicine.
Knox, Jean Howard,	<i>Oklahoma City, Okla.,</i>	Mechanical Eng'g.
Koch, Alfred Prichard,	<i>Alton,</i>	Chemical Eng'g.
Koch, Reuben Arles,	<i>Urbana,</i>	Music.
Kolker, Katherine Joan,	<i>Quincy,</i>	General, L. and A.

Kratz, Alonzo Plumsted,	<i>Champaign,</i>	Mechanical Eng'g.
Krueger, Ernst Theodore,	<i>Blue Island,</i>	General, L. and A.
Lain, Fred A,	<i>Slater, Mo.,</i>	General, L. and A.
Lake, Mrs. Effie Estelle,	<i>Champaign,</i>	Music.
Lake, Elmer S,	<i>Cantrall,</i>	General, L. and A.
Landgrebe, Edmund Christian,	<i>Huntingburg, Ind.,</i>	Civil Eng'g.
Larabee, Charles David,	<i>Paw Paw,</i>	Chemistry.
Larimer, Robert Sherman,	<i>Evanston,</i>	Civil Eng'g.
Latham, William Arthur,	<i>Kankakee,</i>	Agriculture.
Laycock, Mary Janet,	<i>Waverly,</i>	General Science.
Lee, Mary Howard,	<i>Aledo,</i>	General, L. and A.
Lee, Mylo,	<i>Aledo,</i>	Prep. to Medicine.
Lendrum, Ethel,	<i>Chicago,</i>	General, L. and A.
Lewis, Wilfred,	<i>Dubuque, Ia.,</i>	Civil Eng'g.
Little, Roger Frank,	<i>Tolono,</i>	General, L. and A.
Longfellow, Eben Simon,	<i>Newton, Ia.,</i>	Civil Eng'g.
Lowey, Jessie Rudisill,	<i>Wilmette,</i>	General, L. and A.
Luney, Frank Solon,	<i>De Kalb,</i>	Mechanical Eng'g.
McArty, Charles Roy,	<i>Champaign,</i>	Civil Eng'g.
McCaskey, Wendla Justitia,	<i>Chicago,</i>	General, L. and A.
McConaughey, Frank Harold,	<i>Rochelle,</i>	Business, L. and A.
McConoughey, Earl Wyeth,	<i>Chicago,</i>	Civil Eng'g.
McCredie, Hugh, Jr.,	<i>Oklahoma City, Okla.,</i>	General, L. and A.
Mack, Louis William,	<i>Chicago,</i>	General, L. and A.
Mackay, Jesse John	<i>Mt. Carroll,</i>	Agriculture.
MacKay, Sara Davina,	<i>Mt. Carroll,</i>	General Science.
Mackey, George Bartholomew,	<i>Chicago,</i>	Mechanical Eng'g.
McKinney, Harold Burritt,	<i>Urbana,</i>	Mechanical Eng'g.
McManis, James William,	<i>La Moille,</i>	Civil Eng'g.
Maddock, Alice Emily,	<i>Chicago,</i>	General Science.
Maddox, Wilbur Clinton,	<i>Galva,</i>	Electrical Eng'g.
Main, Roscoe Conkling,	<i>Pittsfield,</i>	Prep. to Medicine.
Mandeville, Helen Ruth,	<i>Champaign,</i>	General, L. and A.
Marks, David Thaddeus,	<i>Dixon,</i>	Electrical Eng'g.
Marsh, Charles Mason,	<i>Upper Alton,</i>	General, L. and A.
Marsh, Helen Althea,	<i>Lacon,</i>	General, L. and A.
Martin, Earle W,	<i>Geneseo,</i>	Electrical Eng'g.
Martin, Fred Raymond,	<i>Toluca,</i>	Electrical Eng'g.
Maxwell, Stanley Lyle,	<i>Robinson,</i>	Civil Eng'g.

Maxwell, Wymer Washington,	<i>Charleston,</i>	Architecture.
Meharry, Charles Leo,	<i>Tolono,</i>	Agriculture.
Mellen, Arthur Franklin,	<i>Amboy,</i>	Chemical Eng'g.
Merritt, Harold Emmett,	<i>Salem,</i>	Civil Eng'g.
Meyer, John Frederick, Jr.,	<i>Hannibal, Mo.,</i>	Architecture.
Miller, Alexander Austin,	<i>Aurora,</i>	Electrical Eng'g.
Miller, Alvin Charles,	<i>New Athens,</i>	Mechanical Eng'g.
Miller, James Erickson,	<i>Paxton,</i>	Electrical Eng'g.
Miller, Nelle Grant,	<i>Champaign,</i>	General, L. and A.
Miller, Roy Austin,	<i>Aurora,</i>	Civil Eng'g.
Millspaugh, Martin Laurence,	<i>Davenport, Ia.,</i>	Electrical Eng'g.
Monier, Sara,	<i>Champaign,</i>	Music.
Moore, Joseph Kennedy,	<i>Yorkville,</i>	Civil Eng'g.
Moore, Louis Conway,	<i>Newman,</i>	Mechanical Eng'g.
Moore, Samuel Burns,	<i>Louisville,</i>	Mechanical Eng'g.
Morgan, Ambert Delos,	<i>Hampshire,</i>	Prep. to Medicine.
Morrison, Roger Leroy,	<i>Winnetka,</i>	Prep. to Medicine.
Moss, Charles Taylor,	<i>Urbana,</i>	General, L. and A.
Moss, Myrtle Lucy,	<i>Champaign,</i>	Music.
Moulton, Charles Robert,	<i>Glen Ellyn,</i>	Chemical Eng'g.
Moulton, Walter Ross,	<i>Glen Ellyn,</i>	Electrical Eng'g.
Mowder, Clyde Leroy,	<i>Havana,</i>	Civil Eng'g.
Mueller, Grover Robert,	<i>Chicago,</i>	Mechanical Eng'g.
Mullin, Glen Hawthorne,	<i>Urbana,</i>	General, L. and A.
Murphy, Edwin Roy,	<i>Champaign,</i>	Prep. to Medicine.
Murphy, Emmet Loehr,	<i>Jerseyville,</i>	Architecture.
Murphy, James Russell,	<i>Lincoln,</i>	Electrical Eng'g.
Mussenden, William Sutherland,	<i>Springfield,</i>	Civil Eng'g.
Nelson, Jacob Clark,	<i>Canton,</i>	Agriculture.
Nichol, Marion Starr,	<i>Urbana,</i>	General, L. and A.
Norenberg, Clarence Eugene,	<i>Highland Park,</i>	Architectural Eng'g.
Norris, John Fulton,	<i>Anna,</i>	General, L. and A.
North, Selah Hawley,	<i>Lockport,</i>	Electrical Eng'g.
O'Brien, Charlotte Louise,	<i>Chicago,</i>	General, L. and A.
Oliphant, Chester Edwin,	<i>Ft. Wayne, Ind.,</i>	Electrical Eng'g.
Osburn, Nye Nile,	<i>Wilmington,</i>	Business, L. and A.
Parker, Minnie Lenora,	<i>Taylorville,</i>	General, L. and A.
Parks, Paul Lindley,	<i>Urbana,</i>	Civil Eng'g.
Parmelee, Louis Ray,	<i>Mt. Vernon,</i>	Electrical Eng'g.

Parsons, Irene Mary,	<i>Chicago,</i>	Classical.
Parsons, Maud Edna,	<i>Elgin,</i>	General, L. and A.
Patch, Harold Knowles,	<i>Rushville,</i>	Electrical Eng'g.
Payton, Lyle,	<i>Moline,</i>	Civil Eng'g.
Pearman, Arthur Columbia,	<i>Champaign,</i>	Prep. to Medicine.
Peck, Harry Spencer,	<i>Shepherd,</i>	Civil Eng'g.
Peine, Adelia Lydia Caroline,	<i>Minier,</i>	General, L. and A.
Perkins, Reba Niles,	<i>Urbana,</i>	General, L. and A.
Perreault, Maurice Seraph,	<i>St. Anne,</i>	Civil Eng'g.
Peters, Grant Houston,	<i>Monticello,</i>	General, L. and A.
Pettit, Joseph Flagler,	<i>Clifton Springs, N.Y.,</i>	Civil Eng'g.
Phillips, Guy Derrick,	<i>Chicago,</i>	Civil Eng'g.
Pillsbury, Charles Stephen,	<i>Urbana,</i>	Mechanical Eng'g.
Poorman, Alfred Peter,	<i>Altamont,</i>	Civil Eng'g.
Pope, Henry Patterson,	<i>Moline,</i>	Mechanical Eng'g.
Pope, Jean Andrew,	<i>Moline,</i>	Mechanical Eng'g.
Powers, Lawrence Clemment,	<i>Tiskilwa,</i>	Prep. to Medicine.
Pruitt, Forrest Allen,	<i>Watseka,</i>	Civil Eng'g.
Queen, Walter,	<i>Evansville, Ind.,</i>	Electrical Eng'g.
Randall, James,	<i>Peoria,</i>	Electrical Eng'g.
Ray, Arthur E,	<i>Rockford,</i>	Electrical Eng'g.
Ray, Arthur Jay,	<i>Cuba,</i>	Electrical Eng'g.
Ray, Hugh Light,	<i>Chicago,</i>	Mechanical Eng'g.
Reardon, Charles Carroll,	<i>Delavan,</i>	General Science.
Reardon, Clarence Henry,	<i>Delavan,</i>	General, L. and A.
Rebman, Gail,	<i>Frederick,</i>	General, L. and A.
Remick, Andrew Bernard,	<i>Trenton,</i>	Business, L. and A.
Richardson, William Hadden,	<i>Black River, N. Y.,</i>	Civil Eng'g.
Roberts, Owen Haworth,	<i>Maryville, Mo.,</i>	Architectural Eng'g.
Robertson, Norman Sumner,	<i>Beardstown,</i>	Business, L. and A.
Robinette, Eva Mae,	<i>Urbana,</i>	Music.
Robinson, Charles Sumner,	<i>Chicago,</i>	General Science.
Rolfe, Amy Lucile,	<i>Champaign,</i>	General Science.
Rosecrans, Bennett Paine,	<i>Champaign,</i>	Civil Eng'g.
Ross, Lloyd Elliott,	<i>White Hall,</i>	Electrical Eng'g.
Ross, Roy Van,	<i>White Hall,</i>	General, L. and A.
Ryan, Jessie,	<i>Paris,</i>	General, L. and A.
St. John, Alfred Harvey,	<i>Utica,</i>	Mechanical Eng'g.
Sampson, Harry Coolidge,	<i>Highland Park,</i>	Civil Eng'g.
Sanders, John James,	<i>Chicago,</i>	Civil Eng'g.

Savidge, Harry,	<i>Farmer City,</i>	Civil Eng'g.
Schafmayer, Albert James,	<i>Scales Mound,</i>	Civil Eng'g.
Schaller, Alwin,	<i>Mendota,</i>	Mechanical Eng'g.
Schertz, Albert Charles,	<i>Tiskilwa,</i>	Business, L. and A.
Schroeder, William Frederick,	<i>Rock Island,</i>	Electrical Eng'g.
Schumacher, Louis Gustav,	<i>St. Joseph, Mo.,</i>	Electrical Eng'g.
Scott, James Robinson, Jr.,	<i>Champaign,</i>	Civil Eng'g.
Scott, Miriam Elsie,	<i>Chicago,</i>	General, L. and A.
Scott, William Renick,	<i>Seymour,</i>	Electrical Eng'g.
Seaman, Arthur Terwilliger,	<i>Elgin,</i>	Civil Eng'g.
Shade, Henry Roscoe,	<i>Bloomington,</i>	Agriculture.
Shade, Imogene,	<i>Bloomington,</i>	General, L. and A.
Shaw, Hazel Yearsley,	<i>Urbana,</i>	General, L. and A.
Sheppard, Lawrence Dunlap,	<i>Keokuk, Ia.,</i>	Civil Eng'g.
Silliman, Henrietta,	<i>Toulon,</i>	General, L. and A.
Singbusch, Arthur Carl, Jr.,	<i>Champaign,</i>	Mechanical Eng'g.
Sinnett, Thomas Patrick,	<i>Crescent City,</i>	General, L. and A.
Slaymaker, Charles Monroe,	<i>Geneseo,</i>	Civil Eng'g.
Sloane, Robert Hugh,	<i>Missoula, Mont.,</i>	
		Mechanical Eng'g.
Slocum, Karl Reemelin,	<i>Chicago,</i>	Mechanical Eng'g.
Smith, Claude Everett,	<i>Springfield,</i>	Electrical Eng'g.
Smith, Helen Brownell,	<i>Chicago,</i>	General, L. and A.
Smith, Lowell Babcock,	<i>Sycamore,</i>	General, L. and A.
Smith, Mabel,	<i>Urbana,</i>	General, L. and A.
Smith, Sidney Benjamin,	<i>Springfield,</i>	Agriculture.
Smith, William W, A. B., 1900,	<i>Broadlands,</i>	Civil Eng'g.
Snider, Earl Quinter,	<i>Urbana,</i>	General Science.
Somers, Florence Barbara,	<i>Ft. Dodge, Ia.,</i>	General, L. and A.
Sprague, Florence Olive,	<i>Lockport,</i>	General, L. and A.
Spray, Edith Lillian,	<i>Arlington Heights,</i>	
		Library, L. and A.
Stahl, Lloyd Richard,	<i>Chillicothe,</i>	Electrical Eng'g.
Standard, William Logan,	<i>Lewistown,</i>	General, L. and A.
Stark, Ralph,	<i>Delwood,</i>	Agriculture.
Stearns, Earl Downing,	<i>Champaign,</i>	Mechanical Eng'g.
Stewart, Walter Morgan,	<i>Evanston,</i>	Electrical Eng'g.
Stinson, Spencer A,	<i>Cabery,</i>	Civil Eng'g.
Stowe, Loyd Richard,	<i>Greenville,</i>	Mechanical Eng'g.
Straight, Fleda De Vere,	<i>Fonda, Ia.,</i>	General, L. and A.
Straight, Halver Rufus,	<i>Fonda, Ia.,</i>	Mechanical Eng'g.

Strawn, John Elliot,	<i>Forrest,</i>	Mechanical Eng'g.
Strombeck, George Mauritz,	<i>Moline,</i>	Mechanical Eng'g.
Swartz, Mary Katherine,	<i>Urbana,</i>	General, L. and A.
Swigart, Lois Edna,	<i>Champaign,</i>	General, L. and A.
Tarnoski, Edward Romaine,	<i>Chicago,</i>	Civil Eng'g.
Tarnoski, Paul Thaddeus,	<i>Chicago,</i>	.Chemistry.
Taylor, Fred Coe,	<i>Chicago,</i>	Civil Eng'g.
Taylor, Lee Steward,	<i>Chicago,</i>	Civil Eng'g.
Taylor, Roy Elmer,	<i>Normal,</i>	Agriculture.
Thomas, Herbert Grout,	<i>Moline,</i>	Municipal Eng'g.
Thompson, Emmet Collins,	<i>Byron,</i>	Mechanical Eng'g
Thomson, Fred Newton,	<i>Paxton,</i>	Agriculture.
Tilden, Elmer,	<i>Canton, O.,</i>	Architecture.
Tornquist, Charles Herman,	<i>Champaign,</i>	Civil Eng'g.
Townsend, Rolla Edward,	<i>Marion,</i>	Civil Eng'g.
Trees, Merle John,	<i>Frankfort, Ind.,</i>	Civil Eng'g.
Troxell, Lula,	<i>Edinburg,</i>	General, L. and A.
Tryon, Floyd Clinton,	<i>Woodstock,</i>	Mechanical Eng'g.
Tull, Jessie Ann,	<i>Farmer City,</i>	General, L. and A.
Tull, Nelson Grover,	<i>Farmer City,</i>	General, L. and A.
Uihlein, Oscar Louis,	<i>Milwaukee, Wis.,</i>	Electrical Eng'g.
Vandagriff, Carl William,	<i>Cantrall,</i>	Civil Eng'g.
Van de Greyn, Bert,	<i>Chicago,</i>	Civil Eng'g.
Van Doren, Carl Clinton,	<i>Urbana,</i>	General, L. and A.
Vanneman, Harry Walter,	<i>Urbana,</i>	General, L. and A.
Van Voorhis, Bentley Morton,	<i>Tuscola,</i>	Business, L. and A.
Vasen, Maurice Eschner,	<i>Quincy,</i>	General, L. and A.
Wall, Richard James Francis,	<i>Chicago,</i>	Architectural Eng'g.
Walters, Bertha Evelyn,	<i>Woodstock,</i>	General, L. and A.
Ward, Henry Ben Pope,	<i>Mt. Vernon,</i>	Business, L. and A.
Ward, Owen Martin,	<i>Champaign,</i>	Electrical Eng'g.
Warner, Harry Wallace,	<i>Flora,</i>	Agriculture.
Warner, Victor Eugene,	<i>Flora,</i>	Business, L. and A.
Waterman, Helen Elizabeth,	<i>Davenport, Ia.,</i>	General, L. and A.
Weakley, Howard Grafton,	<i>Shelbyville,</i>	Business, L. and A.
Webber, William Barnett, Jr.,	<i>Urbana,</i>	Mechanical Eng'g.
Welch, Frank Marshall,	<i>Aurora,</i>	Electrical Eng'g.
West, Porter Royal,	<i>Watseka,</i>	Mechanical Eng'g.
Westfall, Curtis Cornelius,	<i>Bushnell,</i>	Civil Eng'g.

White, Anna Blanchard,	<i>St. Joseph, Mo.,</i> General, L. and A.
White, Fred H,	<i>Longview,</i> Agriculture.
Wiley, Ralph Emerson,	<i>Sullivan,</i> Prep. to Medicine.
Wikinson, Mary Stancllyffe,	<i>Champaign,</i> General, L. and A.
Williams, Andrew Price,	<i>Rockford,</i> Agriculture.
Williams, Florence Marie,	<i>Chicago,</i> General, L. and A.
Williams, George Annis,	<i>Galva,</i> Electrical Eng'g.
Williamson, Maude,	<i>Houston, Tex.,</i> General, L. and A.
Wilson, Edwin Leonard,	<i>Joliet,</i> General, L. and A.
Wilson, Hugh Edward,	<i>Mason City,</i> General, L. and A.
Wilson, John Dean,	<i>Lafayette, Ind.,</i> Business, L. and A.
Winn, Claude Ethelbert,	<i>Paris,</i> Civil Eng'g.
Winter, Bain Edward,	<i>Charleston,</i> General, L. and A.
Wollaver, Jennie Ella,	<i>Rockford,</i> Household Science.
Wood, Harvey Chase,	<i>Mt. Pulaski,</i> Business, L. and A.
Woodham, Harry,	<i>Albion,</i> General Science.
Woodin, Ernest Clair,	<i>St. Joseph,</i> Mechanical Eng'g.
Worthen, Jeannette Lamb,	<i>Warsaw,</i> General, L. and A.
Wright, Helen Gertrude,	<i>Toulon,</i> General, L. and A.
Wright, Milton Raleigh,	<i>New London, Wis.,</i> Electrical Eng'g.
Wright, William Price,	<i>Libertyville,</i> General, L. and A.
Wright, William Wilberforce,	<i>Carthage, Mo.,</i> Civil Eng'g.
Wyman, Edmond Stanley,	<i>Sycamore,</i> Agriculture.
Yale, Louise Pomeroy,	<i>St. Louis, Mo.,</i> Household Science.
Yant, Raymond Cliff,	<i>Keokuk, Ia.,</i> Civil Eng'g.
Yates, John William,	<i>Dubuque, Ia.,</i> Mechanical Eng'g.
Yeck, Charles Walter,	<i>Flora,</i> Prep. to Medicine.
Young, James Nicholas, Jr.,	<i>Chicago,</i> Civil Eng'g.
Young, Roy Mercer,	<i>Springfield,</i> Civil Eng'g.
Zaerr, Byron Leslie,	<i>Chicago,</i> Electrical Eng'g.
Zelenka, Joseph James,	<i>Savanna,</i> Mechanical Eng'g.

FRESHMEN

Abbott, Elizabeth Mabelle,	<i>Hoopeston,</i> Library, L. and A.
Adams, Harold Wallace,	<i>Danville,</i> Architecture.
Agnew, Leslie Vaughan,	<i>Chesaning, Mich.,</i> Civil Eng'g.
Alexander, John Fielder,	<i>Galva,</i> Civil Eng'g.

Allen, Albert,	<i>Mt. Vernon,</i> Business, L. and A.
Allison, Fred Gray,	<i>Alpha,</i> Agriculture.
Almy, William Herbert,	<i>Sterling,</i> Mechanical Eng'g.
Alpiner, Agatha Hart,	<i>Kankakee,</i> Music.
Ammann, Stella Alice,	<i>Highland,</i> Music.
Anderson, George Herbert,	<i>Roseville,</i> General, L. and A.
Anderson, Ray Holton,	<i>Chicago,</i> Civil Eng'g.
Anderson, Robert Paul,	<i>Onarga,</i> Civil Eng'g.
Angove, Berely Joseph,	<i>Rockford,</i> Mechanical Eng'g.
Arthur, Robert Stuart,	<i>Oak Park,</i> Civil Eng'g.
Ash, Robert Edwin,	<i>Rockford,</i> Mechanical Eng'g.
Ashbrook, Chester Daniel,	<i>Mattoon,</i> Civil Eng'g.
Atwood, Paul Wiley,	<i>Lewistown,</i> Agriculture.
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Baker, Geraldine Louise,	<i>Streator,</i> Music.
Baker, Ruth Marsh,	<i>Champaign,</i> General Science.
Baldwin, Helen Ruby,	<i>Paris,</i> Household Science.
Ball, Albert Newton,	<i>Danville,</i> Electrical Eng'g.
Banks, George S,	<i>Rockford,</i> Electrical Eng'g.
Bannister, Ernest Martin,	<i>Clinton, Ia.,</i> Business, L. and A.
Barber, Ruth Smalley,	<i>Marengo,</i> General, L. and A.
Barclay, Howard Ellis,	<i>Covell,</i> Prep. to Medicine.
Barker, Lawrence Byron,	<i>Batavia,</i> Municipal Eng'g.
Barloga, David Frederick,	<i>Pecatonica,</i> General, L. and A.
Barnhart, Edna Pearl,	<i>Urbana,</i> General, L. and A.
Barr, Nelson Rogers,	<i>Quincy,</i> Electrical Eng'g.
Barrett, Jesse Logan,	<i>Henry,</i> Agriculture.
Bartells, Edwin Jacob,	<i>Camp Point,</i> Chemical Eng'g.
Bartells, George Case, Jr.,	<i>Camp Point,</i> Chemical Eng'g.
Barter, Ada Jane,	<i>Chicago,</i> General, L. and A.
Bartlett, Walter Edgar,	<i>Elburn,</i> Agriculture.
Barto, Daniel Otis,	<i>Champaign,</i> Agriculture.
Bass, Nellie Jane,	<i>Red Oak, Ia.,</i> General, L. and A.
Bateman, James,	<i>Rockford,</i> Electrical Eng'g.
Bauer, August Harvey,	<i>Chicago,</i> Prep. to Medicine.
Baumann, George Stebbins,	<i>Springfield,</i> Electrical Eng'g.
Baume, Henry Bergh,	<i>Galena,</i> Mechanical Eng'g.
Baxter, Charles Bayard,	<i>Nauvoo,</i> Mechanical Eng'g.
Bayley, Richard Wall, Jr.,	<i>Chicago,</i> Mechanical Eng'g.
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Bean, Elsie Margaret,	<i>Blue Mound,</i> Household Science.

Bedford, Clayton Wing,	<i>Wheaton,</i>	Civil Eng'g.
Bernhardt, Caroline,	<i>Chicago,</i>	General, L. and A.
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Besore, Hazel,	<i>Urbana,</i>	General, L. and A.
Bevis, Daily George,	<i>Newton,</i>	Electrical Eng'g.
Bicknell, Fannie Ruth,	<i>Champaign,</i>	General, L. and A.
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Binnie, Edwin Robert,	<i>Dundee,</i>	General, L. and A.
Black, Grace Josephine,	<i>Urbana,</i>	General, L. and A.
Black, William Z,	<i>Urbana,</i>	General Science.
Blake, Charles Lewis,	<i>Watseka,</i>	Civil Eng'g.
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Blount, John Darwin,	<i>Western Springs,</i>	Business, L. and A.
Bolin, William Walter,	<i>Elmwood,</i>	Electrical Eng'g.
Bonham, Winnie Martin,	<i>Macomb,</i>	Civil Eng'g.
Bookwalter, Robert R,	<i>Danville,</i>	General, L. and A.
Boone, Homer Thornton,	<i>Shelbyville,</i>	Electrical Eng'g.
Boothe, Viron Joseph,	<i>El Paso, Tex.,</i>	Electrical Eng'g.
Bowman, Louis Napoleon,	<i>Mason City,</i>	Civil Eng'g.
Bradshaw, Percy Belmont,	<i>Dixon,</i>	Electrical Eng'g.
Brainard, Ralph Fletcher,	<i>Harvard,</i>	Electrical Eng'g.
Brand, Herbert Amery,	<i>Danville,</i>	Civil Eng'g.
Brand, Royden Earl,	<i>Danville,</i>	Agriculture.
Breckenridge, Blanche Fargason,	<i>Urbana,</i>	Music.
Breckenridge, Gladys Sinclair,	<i>Urbana,</i>	General, L. and A.
Bredehoft, Mabel Armena,	<i>Danville,</i>	General, L. and A.
Bredehoft, Nellie Matilda,	<i>Danville,</i>	General, L. and A.
Bressler, Charles Emery, Jr.,	<i>South Bend, Ind.,</i>	Civil Eng'g.
Bronson, Walter Teed,	<i>Streator,</i>	General, L. and A.
Brown, Ruth Elizabeth,	<i>Dixon,</i>	General, L. and A.
Brubaker, Percy Scutt,	<i>Dwight,</i>	Architectural Eng'g.
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Buenger, Louis	<i>Granite City,</i> General, L. and A.
Bullard, Clark Wesley,	<i>Springfield,</i> Electrical Eng'g.
Bumstead, Arthur Pingree,	<i>Dundee,</i> General, L. and A.
Burch, George Francis,	<i>Taylorville,</i> Mechanical Eng'g.
Burgener, Claude Emanuel,	<i>Moweaqua,</i> Electrical Eng'g.
Burgess, Benjamin Payson,	<i>Aurora,</i> Mechanical Eng'g.
Burres, Opal,	<i>Urbana,</i> General, L. and A.
Burroughs, John Edward,	<i>Edwardsville,</i> Civil Eng'g.
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Burwash, Milo Eugene,	<i>Champaign,</i> Agriculture.
Busey, Charles Bowen,	<i>Urbana,</i> General, L. and A.
Busey, Kate Wheeler,	<i>Urbana,</i> General, L. and A.
Busey, Mary,	<i>Urbana,</i> Music.
Busey, Virginia Richards,	<i>Urbana,</i> General, L. and A.
Bushnell, Ethel May,	<i>Urbana,</i> General, L. and A.
Bushnell, Horace Leland,	<i>Urbana,</i> Architectural Eng'g.
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Butler, John Prescott,	<i>Monticello,</i> Civil Eng'g.
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Candor, Robert Jay,	<i>Aledo,</i> Architecture.
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Chamberlain, Carl Coley,	<i>Pittsfield,</i> Civil Eng'g.
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Child, Walter Ellsworth,	<i>Farmingdale,</i> General, L. and A.
Chilton, Ina,	<i>Charleston,</i> Art and Design.
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Clanahan, Robert Hodge,	<i>Springfield,</i> Agriculture.
Clark, Charles Rollin,	<i>Carthage,</i> General Science.
Claypool, Roy Ernest,	<i>Marshall,</i> General, L. and A.
Clayton, Emanuel Harry,	<i>Dixon,</i> Prep. to Medicine.

Cleavinger, John Simeon,	<i>Springfield,</i>	Agriculture.
Clifford, Winnifred Hazel,	<i>Champaign,</i>	General, L. and A.
Clow, Grace Miranda,	<i>Plainfield,</i>	General, L. and A.
Coams, Joseph Booker,	<i>Princeton,</i>	General, L. and A.
Coen, Margaret Doris,	<i>Normal,</i>	Household Science.
Coggeshall, Lester B,	<i>Ridge Farm,</i>	Agriculture.
Coghlan, Byron Kemp,	<i>Kankakee,</i>	Civil Eng'g.
Colburn, Frederick Pryce,	<i>De Kalb,</i>	Electrical Eng'g.
Colburn, Joseph Elliott,	<i>Highland Park,</i>	Electrical Eng'g.
Collins, Mary Lucia,	<i>Urbana,</i>	Household Science.
Connelly, Sarah Ann,	<i>Hume,</i>	General, L. and A.
Cook, Frank Louis,	<i>Oak Park,</i>	Electrical Eng'g.
Cooke, Charles Edmund,	<i>Bowen,</i>	Mechanical Eng'g.
Cooper, Hazle Katherine,	<i>Champaign,</i>	General, L. and A.
Cooper, Homer Hunt,	<i>Shelbyville,</i>	Electrical Eng'g.
Cornell, Ralph Gilbert,	<i>Chicago,</i>	Civil Eng'g.
Corwine, George Delwin,	<i>Delavan,</i>	Civil Eng'g.
Coughenour, Thomas Abram,	<i>Sheldon,</i>	Agriculture.
Cowan, Phelps,	<i>Joliet,</i>	Electrical Eng'g.
Cresap, Dwight Ray,	<i>Cushman,</i>	Agriculture.
Crihfield, Philip A,	<i>Atlanta,</i>	Business, L. and A.
Crossett, Gordon William,	<i>Salem,</i>	Electrical Eng'g.
Crum, Ethel,	<i>Lexington,</i>	General, L. and A.
Cummings, Preston Wirum,	<i>Sheffield,</i>	Mechanical Eng'g.
Curran, Thomas Francis,	<i>Barnett,</i>	Civil Eng'g.
Curtis, Charles Ernest,	<i>Clarendon,</i>	Agriculture.
Dadant, Maurice G,	<i>Hamilton,</i>	Business, L. and A.
Dale, Ada Edith,	<i>McLeansboro,</i>	Music.
David, Samuel Garnett,	<i>Onarga,</i>	Agriculture.
Davidson, Hazel Frances,	<i>Champaign,</i>	General, L. and A.
Davis, Marietta Syrl,	<i>Straight Creek, Kas.,</i>	General, L. and A.
	<i>Urbana,</i>	Household Science.
Davis, Mary Hazel,	<i>Farmer City,</i>	Mechanical Eng'g.
Davis, Seymour Marquiss,	<i>Chicago,</i>	Chemical Eng'g.
De Lany, Clarence Martin,	<i>Gibson City,</i>	Business, L. and A.
Denne, Alfred Eugene,		
Denny, Mrs. Josephine Ph. B.,	<i>Lincoln,</i>	Art and Design.
(<i>Lincoln Univ.</i>) 1877,	<i>Chicago,</i>	General, L. and A.
Devine, Mary Margaret,	<i>Morris,</i>	General, L. and A.
Dewey, Chester Robert,	<i>Chicago,</i>	Civil Eng'g.
De Witt, Homer Roscoe,		

Dicke, Otto Arthur,	<i>St. Louis,</i>	Civil Eng'g.
Dickinson, Nelle Major,	<i>Eureka,</i>	Household Science.
Diggins, Ralph Clayton,	<i>Harvard,</i>	Electrical Eng'g.
Dillehunt, Richard Benjamin,	<i>Decatur,</i>	Prep. to Medicine.
Dillon, Bessie,	<i>Normal,</i>	Household Science.
Dillon, Edna Leila,	<i>Urbana,</i>	General, L. and A.
Dillon, Lee Amos,	<i>Sheldon,</i>	General, L. and A.
Dillon, Robert Martin,	<i>Danville,</i>	Mechanical Eng'g.
Disosway, Dan Slife,	<i>Sheldon,</i>	General, L. and A.
Dixon, Nellie Mabel,	<i>Streator,</i>	General, L. and A.
Doherty, Mary Gertrude,	<i>La Grange,</i>	General, L. and A.
Dohren, Henry Richard,	<i>Chicago,</i>	Mechanical Eng'g.
Donoho, Earl Willoughby, A. B.,		
(McKendree Coll.) 1904,	<i>Troy,</i>	Electrical Eng'g.
Doron, William Hyde,	<i>Cold Spring, N. Y.,</i>	Electrical Eng'g.
Doyle, Francis Aloysius,	<i>Chicago,</i>	Agriculture.
Doyle, John Carlisle,	<i>Farmer City,</i>	Agriculture.
Doyle, Robert Emmett,	<i>Chicago,</i>	Agriculture.
Dugan, Charles Bedard,	<i>La Salle,</i>	Electrical Eng'g.
Dunham, Neill Chauncey,	<i>Marengo,</i>	Agriculture.
Dunivant, John Bell,	<i>Cairo,</i>	Agriculture.
Dunning, Frank Wright,	<i>Aurora,</i>	Mechanical Eng'g.
Dunning, William Benjamin,	<i>Aurora,</i>	Civil Eng'g.
Durland, Alice Harriet,	<i>La Grange,</i>	General, L. and A.
Dyckes, Lawrence Julian,	<i>Lewistown,</i>	General, L. and A.
Dyer, Clyde Farrington,	<i>Kankakee,</i>	Agriculture.
East, Ella Genevieve,	<i>St. Louis, Mo.,</i>	General, L. and A.
Edwards, Jeannette Ellen,	<i>Champaign,</i>	Classical.
Edwards, Jessie May,	<i>Urbana,</i>	General, L. and A.
Eggleston, Mary Adeline,	<i>Urbana,</i>	General, L. and A.
Eldred, Charles Howard,	<i>South Bend, Ind.,</i>	Prep. to Medicine.
Ellis, Arthur Jackson,	<i>Thornton,</i>	General Science.
Elliston, Leroy Bertram,	<i>Princeton,</i>	Electrical Eng'g.
Emery, Cecil,	<i>Tallula,</i>	Political Science.
Emery, Paul Raymond,	<i>Tallula,</i>	Electrical Eng'g.
Etherton, Harmon James,	<i>E. St. Louis,</i>	Architecture.
Evvard, John Marcus,	<i>Pontiac,</i>	Agriculture.
Ewing, Harriet Grace,	<i>St. Joseph, Mo.,</i>	Household Science.

Eyer, Ruth Elizabeth,
 Faber, Daniel Cleveland,
 Fallon, Clara May,
 Farrell, Edgar Henry,
 Farwell, Stanley Prince,
 Fast, Emmett Emerson,
 Fennessy, Clinton Lloyd,
 Ferry, Hoyt Fouche,
 Firebaugh, Esther,
 Fisher, Ora Stanley,
 Forester, Robert Jackson,
 Forester, Walter James,
 Fosler, Charles Edward,
 Fossland, Gerard Leonard,

Fox, Mabel Elizabeth,
 Fullenwider, Alice Evelyn,
 Furrow, Elmer Otis,
 Gailey, Rowena Lucille,
 Gardiner, John James,
 Garrett, Florence Ethel,
 Garrison, Lloyd,
 Gass, Martin John,
 Gates, Edgar Franklin,
 Gates, Orus Ethan,
 Geary, Clinton Garfield,
 Gentsch, Vida Celinda,

Gibbons, Earl Espey,
 Gibson, Miles Otto,
 Gifford, Edna May,
 Gillette, Della May,

Gilstrap, Eugene Franklin,
 Glassco, Ray John,
 Gonnerman, Harrison Fredrick,
 Goodspeed, Frank,
 Grady, Charles Hubert,
 Grady, Paul L.,
 Graham, Mary Adelaide,
 Grant, David John,

Plainfield, General, L and A.
Paw Paw, Electrical Eng'g.
Champaign, General, L. and A.
Clinton, Ia., Civil Eng'g.
Chicago, Electrical Eng'g.
Princeville, Mechanical Eng'g.
Litchfield, Electrical Eng'g.
Pleasant Plains, Agriculture.
Robinson, General, L. and A.
Washburn, Civil Eng'g.
Du Quoin, Electrical Eng'g.
Du Quoin, Business, L. and A.
Savanna, Mechanical Eng'g.
Winthrop Harbor,
 Mechanical Eng'g.
Danville, Household Science.
Mechanicsburg, General, L. and A.
Potomac, General, L. and A.
Ashland, Library, L. and A.
Urbana, Civil Eng'g.
Plano, General, L. and A.
Milford, Electrical Eng'g.
Danville, Civil Eng'g.
Girard, Electrical Eng'g.
Tuscola, Electrical Eng'g.
Polo, Agriculture.
New Philadelphia, O.,
 General, L. and A.
Hoopeston, Agriculture.
Urbana, Mechanical Eng'g.
Elgin, Household Science.
Traverse City, Mich.,
 Library, L. and A.
Tacoma, Wash., Architecture.
Charleston, Agriculture.
Dixon, Civil Eng'g.
Joliet, Architectural Eng'g.
Maroa, Agriculture.
Bloomington, Civil Eng'g.
Springfield, General, L. and A.
De Kalb, Civil Eng'g.

Graves, Zola Maie,	<i>Council Bluffs, Ia.,</i>	General, L. and A.
Greene, Ruth Elouise,	<i>Raymond,</i>	Household Science.
Greene, William Bertram,	<i>Lisle,</i>	Mechanical Eng'g.
Gregg, Harry Lee,	<i>Galesburg,</i>	Agriculture.
Gregory, Lenna Mabel,	<i>Moweaqua,</i>	General, L. and A.
Gregory, Myrtle Minnie,	<i>Moweaqua,</i>	General, L. and A.
Gridley, Clara Louise,	<i>Virginia,</i>	Library, L. and A.
Griffin, Eli Raymond,	<i>Moline,</i>	Architectural Eng'g.
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Hadfield, Elizabeth Mary,	<i>Chicago,</i>	Library, L. and A.
Hagnauer, Arno Walter,	<i>Highland,</i>	Chemistry.
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Haines, Mary Martha,	<i>Champaign,</i>	Music.
Hales, Andrew Reed,	<i>Tolona,</i>	Electrical Eng'g.
Hall, Edward Leverich,	<i>Danville,</i>	Architectural Eng'g.
Hall, Ethel Lottie,	<i>Urbana,</i>	General, L. and A.
Hall, Ward Elmo,	<i>La Moille,</i>	Electrical Eng'g.
Hamilton, Gene,	<i>Dwight,</i>	General, L. and A.
Hamilton, Virginia Louise,	<i>Ashland,</i>	General, L. and A.
Hanna, Bessie Jean,	<i>Chicago,</i>	General, L. and A.
Hanson, Frank Lawrence,	<i>Chicago,</i>	Electrical Eng'g.
Hanson, Mabel Irene,	<i>Urbana,</i>	Music.
Harder, Rubey Osgood,	<i>Lockport,</i>	Civil Eng'g.
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Harris, Albert Jesse,	<i>Springfield,</i>	Electrical Eng'g.
Harris, Archibald Overton,	<i>Dallas, Tex.,</i>	Civil Eng'g.
Harris, Herbert Benjamin,	<i>Berwyn,</i>	Chemical Eng'g.
Harrison, Florence,	<i>Danville,</i>	Household Science.
Hart, Walter Edwin,	<i>Rock Island,</i>	Electrical Eng'g.
Hasson, Harry Bovard,	<i>Moline,</i>	Chemical Eng'g.
Hatten, Frank Wyatt,	<i>Delavan,</i>	Electrical Eng'g.
Hawley, Ralph S,	<i>La Grange,</i>	General, L. and A.
Hayes, Augustus Washington,	<i>Pleasant Plains,</i>	Agriculture.
Haynes, Mark Ross,	<i>La Salle,</i>	Civil Eng'g.
Hazard, Herbert Lee,	<i>Dixon,</i>	Civil Eng'g.
Helfrich, William Noel,	<i>Carthage,</i>	General, L. and A.
Hellstrom, Klaus Edward,	<i>Evanston,</i>	Electrical Eng'g.
Hendricker, John Fred,	<i>Aurora,</i>	Electrical Eng'g.

Hess, Abigail Maria,	<i>Flora,</i>	Household Science.
Hesse, Lawrence Gere,	<i>Evanston,</i>	Electrical Eng'g.
Hill, Nathan Richard,	<i>Champaign,</i>	Civil Eng'g.
Hinds, Jesse Parker,	<i>Newton,</i>	Electrical Eng'g.
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Holmes, George Bruce,	<i>Macomb,</i>	Architectural Eng'g.
Honeywell, Gilbert Charles,	<i>Hoopeston,</i>	Agriculture.
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Horrom, Robert Elmer,	<i>Atlanta,</i>	Mechanical Eng'g.
Hosford, Frank Truman,	<i>Urbana,</i>	General, L and A.
Howe, Mary,	<i>Urbana,</i>	Household Science.
Howser, Theron Robinson,	<i>Lincoln,</i>	Civil Eng'g.
Hudson, Harry Henry,	<i>Galva,</i>	Civil Eng'g.
Hueckel, Albert Philip,	<i>Caseyville,</i>	Civil Eng'g.
Huff, Florence Lenore,	<i>Urbana,</i>	General, L. and A.
Huff, Walter William,	<i>Sullivan,</i>	Civil Eng'g.
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Hull, Horace,	<i>Chicago,</i>	Municipal Eng'g.
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Hunt, Lawrence Richard,	<i>Henry,</i>	Business L. and A.
Hurford, Roland Rogers,	<i>Glencoe,</i>	Electrical Eng'g.
Hursh, Ralph Kent,	<i>Macomb,</i>	Mechanical Eng'g.
Hurt, Luallie Belle,	<i>Urbana,</i>	General, L. and A.
Hutchinson, Ella May,	<i>Odell, Neb.,</i>	General, L. and A.
Ingham, Rolla Tenney,	<i>Clinton,</i>	General, L. and A.
Irwin, Burr Polk,	<i>Quincy,</i>	Mechanical Eng'g.
Irwin, Decatur Howell,	<i>Springfield,</i>	General Science.
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James, Delos Lawrence,	<i>Huntley,</i>	Agriculture.
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Jens, Roy Edward,	<i>Rock Island,</i>	Electrical Eng'g.
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Johnson, William,	<i>Fairmount, Ind.,</i>	Electrical Eng'g.
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Johnston, Elizabeth Jane,	<i>Illioopolis,</i>	Library, L. and A.
Jordan, Erwin Byron,	<i>Orion,</i>	Civil Eng'g.
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Kahlert, Herbert Edward,	<i>Carlyle,</i>	Electrical Eng'g.
Karraker, Edward Leo,	<i>Jonesboro.</i>	Civil Eng'g.

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Kegley, Franklin Thompson, Jr.,	<i>Urbana,</i>	Architecture.
Kelley, De Witt Warner,	<i>Oglesby,</i>	Civil Eng'g.
Kelly, Ada May,	<i>Keokuk, Ia.,</i>	Architecture.
Kelso, Ruth,	<i>Washington C. H., O.,</i>	General, L. and A.
Kendall, Helen Virginia,	<i>Princeton,</i>	Household Science.
Kerr, Bartlett Martin,	<i>Urbana,</i>	Mechanical Eng'g.
Kincaid, Todd Purcell,	<i>Greenview,</i>	Agriculture.
Kiser, Mary Bell,	<i>Pittsfield,</i>	General, L. and A.
Klewer, Arthur Leonard,	<i>Chicago,</i>	Architecture.
Kultchar, Eugene Frank,	<i>Winnetka,</i>	General, L. and A.
Kuss, Harry,	<i>Peoria,</i>	Chemistry.
Laflin, Mary Elizabeth,	<i>Champaign,</i>	Music.
Lane, Cora May,	<i>Sullivan,</i>	General, L. and A.
Lane, Herrick Johnson,	<i>Fremont, O.,</i>	Civil Eng'g.
Lanferman, Walter Edward,	<i>Chicago,</i>	Electrical Eng'g.
Lange, Ida Louise,	<i>Chicago,</i>	Library, L. and A.
Langford, Fred Henderson,	<i>Paxton,</i>	Civil Eng'g.
Langworthy, Lester Raymond,	<i>Lanark,</i>	General Science.
Large, George Pence,	<i>Owaneco,</i>	Electrical Eng'g.
Large, Zelma Ria,	<i>Taylorville,</i>	General, L. and A.
Latzer, Robert Louis,	<i>Highland,</i>	Agriculture.
Lee, Gertrude Ann,	<i>Champaign,</i>	General, L. and A.
Legg, Clark Lawrence,	<i>Pontiac,</i>	General, L. and A.
Leidendecker, Frank Earl,	<i>Champaign,</i>	Mechanical Eng'g.
Leonard, Howard George,	<i>Wheaton,</i>	Electrical Eng'g.
Lewis, Mamie Beach,	<i>Fairbury,</i>	General, L. and A.
Lewis, Sherman,	<i>Marseilles,</i>	Mechanical Eng'g.
Lewis, Thomas Beach,	<i>Fairbury,</i>	Business, L. and A.
Logan, Forrest Marine,	<i>Greenburgh, Ind.,</i>	Civil Eng'g.
Long, Arthur Theodore,	<i>St. Louis, Mo.,</i>	General, L. and A.
Loomis, Nellie Alice,	<i>Chicago,</i>	General Science.
Loutzenhiser, Ernest H,	<i>Danville,</i>	Mechanical Eng'g.
Love, Norma Catherine,	<i>Danville,</i>	General, L. and A.
Love, Robert James,	<i>Hoopeston,</i>	Architecture.
Lowry, Thomas Grover,	<i>Upper Alton,</i>	Civil Eng'g.
McCormick, Oscar Alden,	<i>Plymouth,</i>	Electrical Eng'g.
McCoy, Milton Howard,	<i>Chicago Heights,</i>	Civil Eng'g.
McCullough, Frederick R,	<i>Streator,</i>	Business, L. and A.
McDowell, Reuben Ross,	<i>Lewistown,</i>	Chemistry.

McIntyre, Ella Elliott,	<i>Urbana,</i>	General, L. and A.
McIntyre, Ruhama Louise,	<i>Newman,</i>	General, L. and A.
McKelvey, Arthur Wilson,	<i>Sparta,</i>	General, L. and A.
McLean, John Crocker,	<i>Maroa,</i>	Mechanical Eng'g.
McMillan, Matthew Hunter,	<i>Cutler,</i>	Electrical Eng'g.
Madison, George,	<i>Savanna,</i>	Electrical Eng'g.
Magoon, Helen Cornelia,	<i>Champaign,</i>	General Science.
Maguire, William Chester,	<i>Urbana,</i>	Business, L. and A.
Mahler, Carl,	<i>Highland,</i>	Chemical Eng'g.
Malcolm, Howard Stout,	<i>Roseville,</i>	Civil Eng'g.
Mangold, Charles Hugh,	<i>Anna,</i>	Electrical Eng'g.
Mann, Howard Leslie,	<i>Kankakee,</i>	Electrical Eng'g.
Mann, Mary Elizabeth,	<i>Gilman,</i>	General, L. and A.
Manspeaker, Edith Gruver,	<i>Champaign,</i>	Household Science.
Marshall, Chester Arthur,	<i>Mokena,</i>	General, L. and A.
Martin, John Linton,	<i>Wilmington,</i>	Agriculture.
Matthews, Martha Marie,	<i>Onarga,</i>	Household Science.
Matthews, Nellie Pearl,	<i>Clinton,</i>	General, L. and A.
Maxey, Harold Le Roy,	<i>Urbana,</i>	General, L. and A.
Maze, Everett Andy,	<i>Anna,</i>	Electrical Eng'g.
Melloy, Martin Aloysius,	<i>Libertyville,</i>	Civil Eng'g.
Merry, Carl Emmett,	<i>Urbana,</i>	Mechanical Eng'g.
Miller, Chester Branch,	<i>Champaign,</i>	General, L. and A.
Miller, Mildred Florence,	<i>Lincoln,</i>	Household Science.
Miller, William Townshend,	<i>McLeansboro,</i>	General, L. and A.
Miner, Ada Mae,	<i>Champaign,</i>	General, L. and A.
Mitchell, Brian Leonard,	<i>Chicago,</i>	Chemical Eng'g.
Mitchell, Harold Hanson,	<i>Chicago,</i>	Chemical Eng'g.
Moore, Warren Hamilton,	<i>Chicago,</i>	General, L. and A.
Morey, Benjamin Franklin,	<i>Clinton, Ind.,</i>	Agriculture.
Morgan, Chester Pond,	<i>Evansville, Wis.,</i>	Architecture.
Morgan, Meryl Stanly,	<i>Galva,</i>	Civil Eng'g.
Morris, William West,	<i>Chicago,</i>	General Science.
Morton, James Felix,	<i>Vienna,</i>	Electrical Eng'g.
Munger, Frank Arthur,	<i>De Kalb,</i>	Mechanical Eng'g.
Munger, Guy Elmer,	<i>Rock Island,</i>	Mechanical Eng'g.
Munn, Eugene Lucius,	<i>Freeport,</i>	Civil Eng'g.
Murrell, Benjamin Nathan,	<i>Vienna,</i>	General, L. and A.
Myers, Lloyd Rhodes,	<i>Hinsdale,</i>	General, L. and A.
Nave, John Kirk,	<i>Attica, Ind.,</i>	General, L. and A.
Nebeker, Mark Edmond,	<i>Clinton, Ind.,</i>	Business, L. and A.

Needles, Elmer Henry,	<i>Belleville,</i>	Agriculture.
Newbauer, Ella Cora,	<i>Highland,</i>	General, L. and A.
Newman, John Adams,	<i>Springfield,</i>	Electrical Eng'g.
Nicodemus, Frederick Bowman,	<i>Forreston,</i>	Civil Eng'g.
Nitz, Ingo Charles,	<i>Chicago,</i>	Electrical Eng'g.
Norris, Ralph Varney,	<i>Chicago,</i>	Agriculture.
*North, James H,	<i>El Paso,</i>	Civil Eng'g.
Noth, George Joseph,	<i>Davenport, Ia.,</i>	Electrical Eng'g.
Nydegger, Charlotte Marie,	<i>Danville,</i>	Household Science.
Olmsted, George Chauncey,	<i>Chattanooga, Tenn.,</i>	Mechanical Eng'g.
Olsen, Sharon Marmo,	<i>Morgan Park,</i>	Civil Eng'g.
Orndorff, Frank Millikin,	<i>Delavan,</i>	Business, L. and A.
Osborn, John Milton,	<i>Butler,</i>	Civil Eng'g.
Osborn, Richard Ervin,	<i>Moswaqua,</i>	General, L. and A.
Ostrander, Mabel Verona,	<i>Chicago,</i>	General, L. and A.
Otis, Henrietta Marie,	<i>Marengo,</i>	General, L. and A.
Parker, Bertner Irving,	<i>Tuscola,</i>	General, L. and A.
Parker, Clarence Goulding,	<i>St. Louis, Mo.,</i>	Chemical Eng'g.
Parker, Washington Warner,	<i>Elgin,</i>	Electrical Eng'g.
Parks, Dwight Comstock,	<i>Murphysboro,</i>	Agriculture.
Perry, Winifred Almina,	<i>Cornell,</i>	Library, L. and A.
Petersen, John Bernard,	<i>Oak Park,</i>	Chemical Eng'g.
Pettit, Roswell Talmage,	<i>Ottawa,</i>	Prep. to Medicine.
Pfisterer, George Edward,	<i>Sterling,</i>	Mechanical Eng'g.
Phillips, Claude Watson,	<i>Marion,</i>	Civil Eng'g.
Phillips, Lawrence Clifford,	<i>Streator,</i>	Electrical Eng'g.
Phillips, Victor Leo,	<i>Mt. Carroll,</i>	Civil Eng'g.
Pillinger, Ralph Alfred,	<i>Chicago,</i>	Mechanical Eng'g.
Pinckney, Frank Loyer,	<i>Pontiac,</i>	Mechanical Eng'g.
Pond, Ethel Claire,	<i>Sycamore,</i>	General Science.
Ponzer, Emma,	<i>Henry,</i>	General, L. and A.
Pope, Charles Samuel,	<i>Moline,</i>	Electrical Eng'g.
Porterfield, Nellie Mildred,	<i>Fairmount,</i>	General, L. and A.
Powell, Harry Lawrence, Jr.,	<i>Belleville,</i>	Civil Eng'g.
Powell, Jessie Alexander,	<i>Corydon, Ky.,</i>	General, L. and A.
Powers, Hiram James,	<i>Taylorville,</i>	Electrical Eng'g.
Powers, Wilbur Lewis,	<i>Tiskilwa,</i>	General, L. and A.
Raab, Frank Henry,	<i>Belleville,</i>	Prep. to Medicine.
de la Rama, Jose,	<i>Bacolod, P. I.,</i>	Agriculture.

*Deceased.

Reams, Herman Emerson,	<i>Chicago,</i>	Mechanical Eng'g.
Reece, Wade W,	<i>Rossville,</i>	Electrical Eng'g.
Reeves, Alfred James,	<i>Morris,</i>	General, L. and A.
Reynolds, Fred Martin,	<i>Riverside,</i>	Civil Eng'g.
Rich, Mary Frederica,	<i>Springfield,</i>	General, L. and A.
Richards, Percy McClure,	<i>Peoria,</i>	Electrical Eng'g.
Richardson, Carl Barrows,	<i>Tampico,</i>	Civil Eng'g.
Richelsen, Walter Alfred,	<i>Chicago,</i>	Civil Eng'g.
Ricketts, Hugh Chambers,	<i>Charleston,</i>	Business, L. and A.
Riley, Alice,	<i>Champaign,</i>	General, L. and A.
Risser, Ralph Granville,	<i>Kankakee,</i>	Agriculture.
Roberts, Glenn Baird,	<i>Chicago,</i>	General, L. and A.
Robertson, Roy Clifton,	<i>Peoria,</i>	Mechanical Eng'g.
Robinson, Charles Jason,	<i>Manteno,</i>	Agriculture.
Robinson, Raymond Elder,	<i>Oak Park,</i>	Mechanical Eng'g.
Robinson, Willis Singleton,	<i>Champaign,</i>	Mechanical Eng'g.
Robson, Carl David,	<i>Chicago,</i>	Civil Eng'g.
Roll, Alva Eston,	<i>Broadlands,</i>	Electrical Eng'g.
Roney, Ralph Todd,	<i>Decatur,</i>	Prep. to Medicine.
Rook, Mary Susie,	<i>Bowen,</i>	General Science.
Ropp, Franklin Newton,	<i>Chicago,</i>	Civil Eng'g.
Rose, Helen Elizabeth,	<i>Mattoon,</i>	Music.
Ross, Walter Raleigh,	<i>Canton,</i>	Agriculture.
Rowe, Howard Lester,	<i>Elgin,</i>	Civil Eng'g.
Roy, Rose Elizabeth,	<i>Anna,</i>	General, L. and A.
Rush, Philip Scott,	<i>Terre Haute, Ind.,</i>	Business, L. and A.
Rutledge, Nellie Irene,	<i>Mt. Sterling,</i>	General, L. and A.
Ryan, Edwin Groves,	<i>Chicago,</i>	General, L. and A.
Savage, Charles Chase,	<i>Virginia,</i>	General, L. and A.
Schertz, Joseph William,	<i>Tiskilwa,</i>	Civil Eng'g.
Scholz, Herman Albert,	<i>Burlington, Ia.,</i>	Chemistry.
Schroeder, Hugo Christian		
Herman,	<i>Chester,</i>	Prep. to Medicine.
Schulte, Katherine Agnes,	<i>Chicago,</i>	Library, L. and A.
Schulzke, William Henry,	<i>Springfield,</i>	Mechanical Eng'g.
Schumacker, Ramon,	<i>St. Joseph, Mo.,</i>	Architecture.
Schwerin, Arthur,	<i>Burlington, Ia.,</i>	Civil Eng'g.
Scovill, Hiram Thompson,	<i>Rockford,</i>	Business, L. and A.
Scrogin, Edith Naomi,	<i>Lexington,</i>	General, L. and A.
Seay, Rufus Floyd,	<i>Anna,</i>	Agriculture.
Secrest, Paul James,	<i>Petersburg,</i>	Prep. to Medicine.

Seifert, Harry Byron,	<i>Springfield,</i>	Civil Eng'g.
Sellards, Clotine Woodroe,	<i>Champaign,</i>	General, L. and A.
Shackell, Leon Francis,	<i>Galena,</i>	Chemistry.
Shaffer, George Barnsback,	<i>Evansville,</i>	Electrical Eng'g.
Shannon, Agnes Nancy,	<i>Freeport,</i>	Household Science.
Sheriff, Ralph Edwin,	<i>Reynolds,</i>	General Science.
Shields, Charles Culver,	<i>Highland Park,</i>	Mechanical Eng'g.
Shipman, Louise,	<i>De Kalb,</i>	General, L. and A.
Shirk, William Andrew,	<i>Tuscola,</i>	Civil Eng'g.
Siegel, Alma Emma,	<i>Champaign,</i>	General, L. and A.
Sihler, George Albert, Jr.,	<i>Litchfield,</i>	General, L. and A.
Silliman, Levi, Jr.,	<i>Toulon,</i>	General, L. and A.
Simer, Jerome Kenneth,	<i>Champaign,</i>	General, L. and A.
Simpson, Keith Stith,	<i>Carrollton,</i>	General, L. and A.
Sivertson, Leon Frederick,	<i>Paloma,</i>	Mechanical Eng'g.
Slaby, James Estauch,	<i>Chicago,</i>	Electrical Eng'g.
Slawson, Harry Herbert,	<i>Harvard,</i>	General, L. and A.
Slaymaker, George Leonard,	<i>Geneseo,</i>	Agriculture.
Smejkal, Joseph Anton, Jr.,	<i>Chicago,</i>	Civil Eng'g.
Smith, Bruce Potter,	<i>Sheldon,</i>	General, L. and A.
Smith, Claire Howland Wallace,	<i>Urbana,</i>	Civil Eng'g.
Smith, Ellis Edwin,	<i>Joliet,</i>	Business, L. and A.
Smith, Leslie Alden,	<i>Champaign,</i>	Business, L. and A.
Snapp, Dorrance Dibell,	<i>Joliet,</i>	Electrical Eng'g.
Snyder, Paul Noble,	<i>Fulton,</i>	Business, L. and A.
Snyder, Stanley S,	<i>Danville,</i>	General, L. and A.
Solberg, Leif Peder Bjorgvin,	<i>Christiania, Norway,</i>	Mechanical Eng'g.
Sonntag, Elsie Roberta,	<i>Plainfield,</i>	General, L. and A.
Sonntag, Viola Hope,	<i>Plainfield,</i>	General, L. and A.
Southwick, Joe Dare,	<i>Flora,</i>	General, L. and A.
Spencer, Fannie Grace Clara,	<i>Belleville,</i>	Chemistry.
Stair, Jacob Leander, Jr.,	<i>Altamont,</i>	Electrical Eng'g.
Stansbury, William Morris,	<i>Joliet,</i>	General Science.
Stark, Carl Clifton,	<i>Delwood,</i>	Mathematics.
Stephens, Herbert Coles,	<i>Sycamore,</i>	Electrical Eng'g.
Stevenson, James Ross,	<i>Monmouth,</i>	Electrical Eng'g.
Stewart, Charles Arthur,	<i>Genoa,</i>	Agriculture.
Stewart, John Wesley,	<i>Evanston,</i>	Civil Eng'g.
Stitt, William Clarence,	<i>Onarga,</i>	Mechanical Eng'g.
Stockman, Harry George,	<i>Chicago,</i>	Civil Eng'g.

Stone, Paul Prime,	<i>Lincoln,</i>	Business, L. and A.
Stookey, Roy Wayland,	<i>Belleville,</i>	Civil Eng'g.
Storer, Frances Louise,	<i>Champaign,</i>	General, L. and A.
Stollar, Le Roy A.,	<i>Herrin,</i>	General, L. and A.
Strauch, Bernard Andrew,	<i>Chadwick,</i>	General, L. and A.
Stults, Elmer Emerson,	<i>Evanston,</i>	Agriculture.
Sturges, Howard Putnam,	<i>Oak Park,</i>	Architecture.
Styles, Edward Anthony,	<i>Champaign,</i>	Electrical Eng'g.
Sudbrink, Warren Clifford,	<i>Beardstown,</i>	Agriculture.
Swannell, Frederick Wells,	<i>Kankakee,</i>	Mechanical Eng'g.
Swezey, Roswell Beal,	<i>Hinsdale,</i>	Mechanical Eng'g.
Switzer, Francis A.,	<i>Macomb,</i>	Electrical Eng'g.
Taylor, George Alexander,	<i>St. Louis, Mo.,</i>	Civil Eng'g.
Taylor, Virginia Randolph,	<i>Macco, Ky.,</i>	General, L. and A.
Tear, Herbert Lloyd,	<i>Chicago,</i>	Electrical Eng'g.
Ten Broeck, Carlon,	<i>Parsons, Kans.,</i>	Prep. to Medicine.
Tenhaeff, John Alexander,	<i>La Prairie,</i>	Agriculture.
Terrell, Fred,	<i>Colchester,</i>	Mechanical Eng'g.
Teruel, Carlos Garcia,	<i>Mexico City, Mex.,</i>	Electrical Eng'g.
Thomas, Clyde Matthew,	<i>Urbana,</i>	General, L. and A.
Thomson, Jennie Helen,	<i>Paxton,</i>	Art and Design.
Thorpe, Anna Grace,	<i>Rockwell City, Ia.,</i>	General, L. and A.
Tice, Evert Homer,	<i>Greenview,</i>	General, L. and A.
Tilton, Nelle Edith,	<i>Champaign,</i>	Household Science.
Toland, Jessie May,	<i>Urbana,</i>	Library, L. and A.
Toops, Mack,	<i>Champaign,</i>	Civil Eng'g.
Triebel, Otto Louis, Jr.,	<i>Springfield,</i>	Electrical Eng'g.
Trimble, Mary Lillian,	<i>Champaign,</i>	Household Science.
Tucker, Burton Floyd,	<i>Anna,</i>	Electrical Eng'g.
Tucker, Jesse Orrin,	<i>Champaign,</i>	Electrical Eng'g.
Turner, Hazle D,	<i>Atlanta,</i>	Civil Eng'g.
Turnock, Lawrence Charles,	<i>La Grange,</i>	Chemical Eng'g.
Underwood, Wilbert Eugene,	<i>Chicago,</i>	Electrical Eng'g.
Vaile, De Witt Clinton,	<i>Rochelle,</i>	General Science.
Vandersloot, Louis Albert,	<i>Farmington,</i>	General, L. and A.
Van Galder, Cora May,	<i>Rock Island,</i>	Household Science.
Van Inwagen, Frank,	<i>Momence,</i>	Mechanical Eng'g.
Van Petten, Robert Milton,	<i>Champaign,</i>	Mechanical Eng'g.
Van Steenberg, Charles,	<i>Lansing,</i>	Electrical Eng'g.

Vinson, Carrie Estella,	<i>Webb City, Mo.,</i>	General, L. and A.
Von Eschen, Frank,	<i>Champaign,</i>	General, L. and A.
Waddell, Charles Archibald,	<i>Princeton,</i>	Electrical Eng'g.
Wagenknecht, Frank Christian,	<i>Peru,</i>	Business, L. and A.
Wagner, Fritz, Jr.,	<i>Chicago,</i>	Architecture.
Wagner, Robert Charles, Jr.,	<i>Champaign,</i>	Civil Eng'g.
Wagoner, John Dowe,	<i>Ft. Madison, Ia.,</i>	General, L. and A.
Walker, Charles M,	<i>Urbana,</i>	Mechanical Eng'g.
Walker, Roberta Audrey,	<i>Monticello,</i>	General, L. and A.
Wardall, William Jed,	<i>Tuscola,</i>	Prep. to Medicine
Ware, Henry Waughop,	<i>Riverside,</i>	Agriculture.
Warner, James Madison,	<i>Chicago,</i>	Civil Eng'g.
Wasson, Walter Williams,	<i>Chrisman,</i>	Prep. to Medicine.
Waterhouse, Charles Eugene,	<i>Burlington, Ia.,</i>	Mathematics.
Watson, Blaine Humes,	<i>Roseville,</i>	Civil Eng'g.
Waters, James Merton,	<i>Watseka,</i>	General, L. and A.
Watts, William Henry,	<i>Farmingdale,</i>	General Science.
Weatherhead, Drury Lee,	<i>Moline,</i>	Chemical Eng'g.
Webb, Helen Leslie,	<i>Elgin,</i>	Art and Design.
Weber, Emil August,	<i>Champaign,</i>	Civil Eng'g.
Webster, Robert Lorenzo,	<i>Urbana,</i>	General Science.
Weinberg, Nina Mary,	<i>Rushville,</i>	General, L. and A.
Welch, George Richard,	<i>Joliet</i>	Electrical Eng'g.
Welles, Nelle Frances,	<i>Elmwood,</i>	Household Science.
Wennholz, Emma Sophie,	<i>Dundee,</i>	General, L. and A.
Wernham, Emma Lilly,	<i>Marengo,</i>	General, L. and A.
Werno, Cecilia Katheryne,	<i>La Grange,</i>	General, L. and A.
Wernsing, Harry John,	<i>Greenview,</i>	Electrical Eng'g.
Wham, Fred Louis,	<i>Cartter,</i>	General, L. and A.
White, Earl Archibald,	<i>Loon Lake,</i>	Agriculture.
White, Horace Clinton,	<i>Urbana,</i>	General, L. and A.
White, Merrill,	<i>Litchfield,</i>	Business, L. and A.
White, Warren Haworth,	<i>Litchfield,</i>	General, L. and A.
Wickersham, Clarence Edmund,	<i>Roseville,</i>	Electrical Eng'g.
Wilkins, Andrew Clifford,	<i>Champaign,</i>	General, L. and A.
Wilkinson, Stanley,	<i>Kankakee,</i>	Business, L. and A.
Williams, Howard Chandler,	<i>Elgin,</i>	Architectural Eng'g.
Williams, Thomas Thompson,	<i>Murphysboro,</i>	Electrical Eng'g.
Williams, Warren Stephen,	<i>Canton,</i>	Chemical Eng'g.

Williamson, Florence,	<i>Houston, Tex.</i> , General, L. and A.
Williford, Bessie,	<i>Nokomis</i> , General, L. and A.
Wilson, Lelia Sara,	<i>Mason City</i> , General, L. and A.
Wilson, Lester Roy,	<i>Foosland</i> , General Science.
Wilson, Willabelle Bernice,	<i>Champaign</i> , General Science.
Winn, Clarence Clyde,	<i>Whitehall</i> , Electrical Eng'g.
Wolfe, Irmagard Huldah,	<i>Louisville, Ky.</i> , General, L. and A.
Wood, Henry Clay,	<i>De Kalb</i> , Agriculture.
Woodbridge, Mary Emily,	<i>Urbana</i> , General Science.
Wray, Helen,	<i>Winnebago</i> , General Science.
Wright, Julius Milton,	<i>Dwight</i> , Mechanical Eng'g.
Wroughton, Walter Howard,	<i>Aurora</i> , Mechanical Eng'g.
Wussow, August Frank Daniel,	<i>Chicago</i> , Chemistry.
Wyatt, Kirke Kingsley,	<i>La Salle</i> , Electrical Eng'g.
Yardley, Ralph Waldo Emerson,	<i>Mansfield, O.</i> , Architecture.
Yarnell, Jacob Henry,	<i>Bowen</i> , Electrical Eng'g.
Yeaton, Fred Drinkwater,	<i>Indianapolis, Ind.</i> , Civil Eng'g.
Young, Thomas Earl,	<i>Lewiston</i> , Mechanical Eng'g.
Zeising, Henry Hanna,	<i>Glencoe</i> , Civil Eng'g.
Zika, B Robert,	<i>Chicago</i> , General, L. and A.
Zilly, Marie Louise,	<i>Champaign</i> , General, L. and A.
Zink, Herbert Charles,	<i>St. Clair, Mich.</i> , Mechanical Eng'g.

SPECIALS

Abbott, Alice,	<i>Urbana</i> , Architecture.
Abbott, Sara,	<i>Urbana</i> , Architecture.
Abernathy, Sherman Carter,	<i>Danville</i> , Chemistry.
Ackroyd, Henry Skilbeck,	<i>Philadelphia, Pa.</i> , Civil Eng'g.
Agnew, Harry Lee,	<i>Mason City</i> , Agriculture.
Alexander, Ernest,	<i>Edinburg</i> , Agriculture.
Alford, William Davis,	<i>Danvenport, Ia.</i> , Agriculture.
Allison, Harry Orson,	<i>Alpha</i> , Agriculture.
Andree, John William,	<i>Tallula</i> , Electrical Eng'g.
Andrews, Elsie Venner,	<i>Grand Haven, Mich.</i> , Library.
Andrews, Willis Grover,	<i>Piper City</i> , Agriculture.
Apple, Merri Ghloe,	<i>Palestine</i> , General, L. and A.
Applegate, Fred Owen,	<i>Pinkstaff</i> , Agriculture.
Arnold, Ross Harper,	<i>Leland</i> , Electrical Eng'g.
Baker, Alwyn John,	<i>Chicago</i> , Agriculture.
Baldwin, Frank D,	<i>Ipava</i> , Agriculture.

Baldwin, Lewis Freeman,	<i>Ipava,</i>	Agriculture.
Barlow, Mrs. Jennie Coolidge,	<i>Bloomington,</i>	Household Science.
Benedict, Herbert Bernard,	<i>Chicago,</i>	General, L. and A.
Bennett, Stella, B. L. S. 1903,	<i>Belvidere,</i>	General, L. and A.
Bergeson, John Berger,	<i>Eau Claire, Wis.,</i>	Architecture.
Betzberger, John Logan,	<i>Delavan,</i>	Agriculture.
Bickel, William Rollen,	<i>De Land,</i>	Music.
Blair, Josephine Lyons,	<i>Piper City,</i>	Household Science.
Blankley, Alfred Robinson,	<i>Litchfield,</i>	Electrical Eng'g.
Block, Leonora Agnes,	<i>Champaign,</i>	Music.
Boggs, Fred Stanley,	<i>Urbana,</i>	Music.
Boggs, Mrs. Grace Lindley,	<i>Urbana,</i>	Architecture.
Boice, Mrs. Harriet Eliza,	<i>Champaign,</i>	Music.
Boone, Grace Guthrie,	<i>Urbana,</i>	Household Science.
Bopp, Julius Valentine,	<i>Miley,</i>	Agriculture.
Boyd, James Crooke,	<i>Palmyra,</i>	Agriculture.
Boyer, George Hewitt,	<i>St. Louis, Mo.,</i>	Civil Eng'g.
Boyer, Joseph Daniel,	<i>Gratz, Pa.,</i>	Architecture.
Boyer, Olive Ethel,	<i>Bloomington,</i>	Household Science.
Brackenbury, Benjamin Almond,	<i>Cary Station,</i>	Civil Eng'g.
Bracker, Emil Mark Diedrich,	<i>Hillsdale,</i>	Agriculture.
Brand, Carl William,	<i>Champaign,</i>	General, L. and A.
Brazier, Irving Myron,	<i>Chicago,</i>	Agriculture.
Breedlove, Charles,	<i>Urbana,</i>	Electrical Eng'g.
Bregger, Thomas,	<i>Rock Island,</i>	Agriculture.
Brock, George Wallen,	<i>Dubuque, Ia.,</i>	Chemistry.
Bronson, George Durrill,	<i>Urbana,</i>	Agriculture.
Brooks, Mrs. Frona Marie,		
A. M. (<i>Smith Coll.</i>) 1893,	<i>Urbana,</i>	Music.
Brooks, Ira Sandford,	<i>Beecher City,</i>	Agriculture.
Buck, Coburn Fields,	<i>Springfield,</i>	Agriculture.
Buck, Earl Ray,	<i>Franklin Grove,</i>	Agriculture.
Burgess, Frank M.,	<i>Tonica,</i>	Agriculture.
Busey, Bertha,	<i>Urbana,</i>	General, L. and A.
Busey, Frank Augusta,	<i>Urbana,</i>	Music.
Cairns, John Webster,	<i>Hebron,</i>	Electrical Eng'g.
Calder, Ward Allan,	<i>La Harpe,</i>	Electrical Eng'g.
Callaway, Ralph George,	<i>Tuscola,</i>	Agriculture.
Carr, Charles Clement,	<i>Avon,</i>	Electrical Eng'g.
Carson, Luvilla Bardwell,	<i>Champaign,</i>	Music.
Casstevens, Edna Marie,	<i>Fancher,</i>	Household Science.

Cast, George Simeon,	<i>Watseka,</i>	Civil Eng'g.
Caswell, Clarence Alexander,	<i>Wellington,</i>	Agriculture.
Chester, Edward Everett,	<i>Champaign,</i>	Agriculture.
Christman, Hermann, Jr.,	<i>Westervelt,</i>	Agriculture.
Clark, Mrs. Alice Broaddus,		
B. S. 1891,	<i>Urbana,</i>	General, L. and A.
Clark, Mamie Eliza,	<i>Mt. Sterling,</i>	Household Science.
Coen, John Elmer,	<i>Neoga,</i>	Agriculture.
Coleman, Clyde Bestor,	<i>New Windsor,</i>	Agriculture.
Coler, Lewis Anthony,	<i>Denver, Col.,</i>	Civil Eng'g.
Conant, George Stephen,	<i>Kinmundy,</i>	Civil Eng'g.
Conrad, David Emanuel,	<i>Woodhull,</i>	Agriculture.
Constant, Lyman John,	<i>Illiopoliis,</i>	Business, L. and A.
Corbin, Edward Lucius,	<i>Carlinville,</i>	Agriculture.
Cornell, Dick Hadwin,	<i>Cornell,</i>	Electrical Eng'g.
Cornell, Noah Pike,	<i>Sugar Grove,</i>	Agriculture.
Cortright, Clyde Clifford,	<i>Dixon,</i>	Agriculture.
Crathorne, Annie Ellen,	<i>Champaign,</i>	General, L. and A.
Crosthwait, Bruce La Teer,	<i>Bloomington,</i>	Business, L. and A.
Crothamel, Almon Walter,	<i>Clark Summit, Pa.,</i>	Civil Eng'g.
Culver, Walter Allen,	<i>Athens,</i>	Agriculture.
Cutshaw, George William,	<i>Wilmington,</i>	Agriculture.
Daehler, Albert Hartman,	<i>Chadwick,</i>	General, L. and A.
Davidson, Nell Jeannette,	<i>Champaign,</i>	General, L. and A.
Davies, James Otis,	<i>Vienna,</i>	Business, L. and A.
Davis, Albert Edward, Jr.,	<i>Batavia,</i>	Agriculture.
Davis, Hattie Rozella,	<i>Bondville,</i>	Household Science.
Davis, Mary Priscilla,	<i>Farmer City,</i>	General, L. and A.
Deal, Hiram Linus,	<i>Taylorville,</i>	Agriculture.
Deets, Ralph Emerson,	<i>Milledgeville,</i>	Electrical Eng'g.
Demmitt, Charles Raymond,	<i>Illiopoliis,</i>	Civil Eng'g.
Devinney, Harris Gill,	<i>Charleston,</i>	Agriculture.
Dick, George Frederick, Jr.,	<i>Bloomington,</i>	Business, L. and A.
Dietrich, Mrs. Mathilda,	<i>Urbana,</i>	Music.
Dillinger, Harry,	<i>Carbondale,</i>	Agriculture.
Donigan, Frank Lyle,	<i>Dwight,</i>	Mechanical Eng'g.
Doty, Viola Zulema,	<i>Burlington,</i>	General, L. and A.
Downy, Retta,	<i>Putnam,</i>	General, L. and A.
Downs, Orrie Hagar,	<i>Bloomington,</i>	Agriculture.
Downs, Walter James,	<i>Bloomington,</i>	Agriculture.
Dugan, Earl N,	<i>Perry, Ia.,</i>	Architecture.

Dull, Charles Burton,	<i>Tennessee,</i>	Agriculture.
Dunlap, Isabelle Jennie,	<i>Savoy,</i>	Household Science.
Durfee, Mrs. Alice Bristol,	<i>Urbana,</i>	Art and Design.
Ellis, Charles Marion,	<i>Vandalia,</i>	Architecture.
Evans, Frank Lee,	<i>Rantoul,</i>	Agriculture.
Evans, Martin Edward,	<i>Chebanse,</i>	Mech. Eng'g.
Farr, Mrs. Jessica Harriet,	<i>Urbana,</i>	Architecture.
Faulkner, Francis Perry,	<i>Mason City,</i>	Agriculture.
Ferrell, Caesar,	<i>Carterville,</i>	Agriculture.
Finlay, Gerald Henry,	<i>Quincy,</i>	Agriculture.
Fleming, Marcella Augusta,	<i>Bement,</i>	Music.
Folkers, Harry Carl,	<i>Warrensburg,</i>	Agriculture.
Forster, August Frank,	<i>St. Louis,</i>	General, L. and A.
Fraser, Mrs. Alice Eaton,	<i>Champaign,</i>	Music.
Freeman, Frank Stewart,	<i>Heyworth,</i>	Agriculture.
Frey, Earl	<i>Freeport,</i>	Electrical Eng'g.
Fruit, Charles Clayton,	<i>Kenney,</i>	Agriculture.
Fry, Roy Emmett,	<i>Tower Hill,</i>	Agriculture.
Fuller, Wilford Winnie,	<i>Charleston,</i>	Business, L. and A.
Funk, Lyle Wilbur,	<i>Bloomington,</i>	Agriculture.
Funk, Marquis Le Loss,	<i>Shirley,</i>	Agriculture.
Gaddis, William Gory,	<i>Indianapolis, Ind.,</i>	Architecture.
Gaddis, Zoe,	<i>Bondville,</i>	Music.
Gaines, Walter Lee,	<i>Crete,</i>	Agriculture.
Galeener, Mary Christie,	<i>Champaign,</i>	Music.
Gentle, Harry James,	<i>Farmington,</i>	Agriculture.
Gilchrist, George Edward,	<i>Atlanta,</i>	Agriculture.
Gill, Mrs. Rudolph Zerse,	<i>Urbana,</i>	Music.
Gillespie, Louella Ida, A.B. 1904,	<i>Champaign,</i>	Music.
Glasgow, Hugh,	<i>Tennessee,</i>	Agriculture.
Glasgow, Robert Douglass,	<i>Tennessee,</i>	Agriculture.
Glassco, Roy Thomas,	<i>Charleston,</i>	Agriculture.
Goble, Arthur Steen,	<i>Earlville,</i>	Chemistry.
Goss, Stanley Thomas,	<i>Chicago,</i>	Mechanical Eng'g.
Gourley, James Linus,	<i>Paxton,</i>	Agriculture.
Grady, Fred Morris,	<i>Maroa,</i>	Agriculture.
Graham, Ray Austin,	<i>Washington, Ind.,</i>	Agriculture.
Graves, Clinton Henry,	<i>Urbana,</i>	Music.
Graves, John Thomas,	<i>Urbana,</i>	Electrical Eng'g.
Greer, Ellen Rachel,	<i>Champaign,</i>	General, L. and A.
Gregg, Clarence Adolphus,	<i>Galesburg,</i>	Agriculture.

Gregory, Walter Kent,	<i>Sioux Falls, S. D.,</i> Civil Eng'g.
Greig, Mary Agnes,	<i>Chicago,</i> General, L. and A.
Griffiths, Carl Preston,	<i>Pontoosuc,</i> Agriculture.
Griffiths, Walter Milo,	<i>Pontoosuc,</i> Agriculture.
Groom, William Curtis,	<i>Urbana,</i> Art and Design.
Grosh, Wilbur Whitmer,	<i>Mendon,</i> Agriculture.
Gunning, De Lancey Thomas,	<i>Wilmington,</i> Agriculture.
Gurr, William Walter,	<i>Chicago,</i> Mechanical Eng'g.
Hall, Claudia Belle,	<i>Hoopeston,</i> Household Science.
Hall, Quincy Allen,	<i>Milford,</i> Mechanical Eng'g.
Hall, Willis William,	<i>Rockford,</i> Chemistry.
Hana, Leo Gregory,	<i>Providence, R. I.,</i> General Science.
Hanson, Ida Frances,	<i>Urbana,</i> Art and Design.
Hardcastle, Paul Smith,	<i>Carrollton,</i> Agriculture.
Harrington, Oldis Ivan,	<i>Rockford,</i> Mechanical Eng'g.
Harris, Charles,	<i>Moweaqua,</i> Civil Eng'g.
Harris, Elmer Claude,	<i>Du Quoin,</i> Music.
Harris, Gertrude Rudelle,	<i>Urbana,</i> Music.
Harris, William Morgan,	<i>Johnston City,</i> Agriculture.
Harrison, Richard De Armond	<i>Princeton,</i> Agriculture.
Head, Frank William,	<i>Rock Island,</i> Mechanical Eng'g.
Heath, James Roy,	<i>White Heath,</i> Agriculture.
Hecox, Elizabeth Belle,	<i>Sidney,</i> Music.
Heidrich, Arthur Grant,	<i>Peoria,</i> General, L. and A.
Henline, Alma,	<i>Towanda,</i> Agriculture.
Henry, John Earl,	<i>Tippecanoe City, O.,</i> Architecture.
Herrin, George Boyer,	<i>Bunker Hill,</i> Electrical Eng'g.
Herriott, Ombra,	<i>Urbana,</i> Music.
Hertel, Clarence Agnew,	<i>Freeburg,</i> Agriculture.
Herzog, Frank,	<i>Buffalo, N. Y.,</i> Mechanical Eng'g.
Hess, Mrs. Maud Lloyd,	<i>Urbana,</i> Music.
Hester, Edna Adell,	<i>Carbondale,</i> Library.
Hester, Herbert Henry,	<i>Carbondale,</i> Agriculture.
Hickey, Rachel,	<i>Urbana,</i> Music.
Hill, Annetta Adelaide,	<i>Tolono,</i> Music.
Hill, Josephine,	<i>Fillmore,</i> Music.
Hill, Norman Haden,	<i>Champaign,</i> Architectural Eng'g.
Hilleson, Thomas Evald,	<i>Lee,</i> General, L. and A.
Hinton, Bess Entwistle,	<i>Los Angeles, Cal.,</i> Art and Design.
Hodgson, Earnest Warren,	<i>Ottawa,</i> Agriculture.
Holderby, Robert Andrew Parker,	<i>Metropolis,</i> Agriculture.

Holm, Henry Carl,	<i>Lockport,</i>	Agriculture.
Holt, Sidney Viel,	<i>Oncida,</i>	Agriculture.
Hooker, Claude Harrison,	<i>Vienna,</i>	Agriculture.
Horr, Jay Roy,	<i>Gibson City,</i>	General, L. and A.
Hubbârd, Archie Henry,	<i>Red Cedar, Wis.,</i>	Architecture.
Hubbard, Wilbert E,	<i>Gcorgetown,</i>	Agriculture.
Hubbard, Winfield Scott,	<i>Grand Junction, Colo.,</i>	Chemistry.
Huey, Harold E,	<i>Chicago,</i>	Agriculture.
Huff, James Orton,	<i>Rushville,</i>	General, L. and A.
Hughes, Chester Arthur,	<i>Urbana,</i>	Civil Eng'g.
Hughes, Kenneth Reece,	<i>Antioch,</i>	Agriculture.
Hull, Ward Louis,	<i>Roodhouse,</i>	Agriculture.
Hulteen, Victor Emaul,	<i>Buda,</i>	Mechanical Eng'g.
Hummel, William Grandville,	<i>Urbana,</i>	Agriculture.
Hutson, Seba Ford,	<i>Champaign,</i>	Agriculture.
Hutson, Stella Evangeline,	<i>Benton,</i>	Household Science.
Hyde, Rosa Kate,	<i>Rising,</i>	Music.
Jackson, Fanny Rebecca,		
B.L.S. 1903,	<i>Urbana,</i>	General, L. and A.
James, Carl Loren,	<i>Good Hope,</i>	Agriculture.
Jensen, Elof Bernhardt,	<i>Chicago,</i>	Agriculture.
Johann, George Callender,	<i>Canton, Mo.,</i>	Electrical Eng'g.
Johnson, Anna Malinda,	<i>Broadlands,</i>	Music.
Johnson, Fannie Buttmann,	<i>Oak Park,</i>	General, L. and A.
Johnson, Henry William,	<i>Mt. Olive,</i>	General Science.
Johnson, Leslie Virgil,	<i>Taylorville,</i>	Architecture.
Johnson, Mary Alice,	<i>Fairmont, Ind.,</i>	
		General, L. and A.
Johnson, Walter Warren,	<i>Le Roy,</i>	Agriculture.
Johnston, Ross William,	<i>Reynolds,</i>	Agriculture.
Jones, Clarence Onno,	<i>Lincoln,</i>	Agriculture.
Jones, Isabel Eliza,	<i>Champaign,</i>	Music.
Jones, Mabel Evelyn,	<i>Urbana,</i>	Art and Design.
Jorgensen, Frederick Andreas,	<i>Lombard,</i>	Agriculture.
Joy, Harold Pratt,	<i>Chapin,</i>	Agriculture.
Kautz, Will Waddell,	<i>Moweaqua,</i>	Electrical Eng'g.
Keating, Ora Albert,	<i>Champaign,</i>	Art and Design.
Keip, Berthal Gustave,	<i>Salem,</i>	Electrical Eng'g.
Keough, Emmet,	<i>Bath,</i>	Civil Eng'g.
Kerley, Claude,	<i>Timewell,</i>	Agriculture.
Kidwell, Franklin Nelson,	<i>Chicago,</i>	Agriculture.

Kincaid, Arthur Thomas,	<i>Athens,</i>	Agriculture.
Kincaid, Leslie Pearl, Ph. B,		
(<i>Northwestern Univ.</i>) 1902	<i>Farmer City,</i>	Electrical Eng'g.
Kinsey, Mrs. Alice Rich,	<i>Mackinaw,</i>	General, L. and A.
Kneisley, Sara Hall,	<i>Arthur,</i>	Music.
Knox, Walter Renwick,	<i>Orillia, Ont.,</i>	Agriculture.
Krebaum, Hope Beatrice,	<i>Havana,</i>	General, L. and A.
Kurtz, Robert Everett,	<i>Chicago,</i>	Agriculture.
Larson, Thomas Benjamin,	<i>Malta,</i>	Electrical Eng'g.
Law, Frank Fonda,	<i>Fountain Green,</i>	Agriculture.
Leake, Warren Jervis,	<i>Dixon,</i>	Agriculture.
Leonard, Eugene Turner,	<i>Pekin,</i>	General Science.
Lewis, Edgar Guy,	<i>Macomb,</i>	Agriculture.
Linder, Grace,	<i>Urbana,</i>	General, L. and A.
Lindley, Ethelder Frank,	<i>Urbana,</i>	Music.
Lindley, Jessie Salome,	<i>Urbana,</i>	Music.
Littleford, Frank Jason,	<i>Downers Grove,</i>	Agriculture
Logan, Grace Belle,	<i>Edinburg,</i>	Household Science.
Logan, Jane,	<i>Dyer ville, Cal.,</i>	General, L. and A.
Logan, Mary Edna,	<i>Dyer ville, Cal.,</i>	General Science.
Logan, Una Mildred, .	<i>Dyer ville, Cal.,</i>	Household Science.
Logeman, Louis Valentine,	<i>Chicago,</i>	Agriculture.
Lohman, Curtis S,	<i>Reno,</i>	Agriculture.
Lohman, Howard Alonzo,	<i>Urbana,</i>	Agriculture.
Long, Joseph Ayres,	<i>Amboy,</i>	Civil Eng'g.
Lott, Eva Alberta,	<i>Urbana,</i>	Music.
Lutz, Frank Llewellyn,	<i>Astoria,</i>	Agriculture.
Lycan, Charles Peter,	<i>Paris,</i>	Civil Eng'g.
Macalister, Robert Norman,	<i>Chicago,</i>	Mechanical Eng'g.
McCain, Myrtle B,	<i>Bloomington,</i>	Household Science.
McCarty, William Frederick,	<i>Tuscola,</i>	Agriculture.
McClain, Clara Louise,	<i>Urbana,</i>	Music.
McClenahan, John Robert,	<i>Manhattan,</i>	Agriculture.
McCormick, Mary Allen,	<i>Verona,</i>	Household Science.
McCown, Arthur Logan,	<i>Newman,</i>	Agriculture.
McCoy, Earl Elleson,	<i>Dallas, Tex.,</i>	Music.
McCreery, Chester Ray,	<i>Rushville,</i>	Agriculture.
McDorman, John,	<i>Selma, O.,</i>	Agriculture.
McFarland, Walter E,	<i>Delavan,</i>	Mechanical Eng'g.
McGinley, Mrs. Gertrude Knowles,	<i>Moweaqua,</i>	General, L. and A.
Mackay, Zella Graham,	<i>Mt. Carroll,</i>	Household Science.

McLean, Mrs. Pearl,	<i>Champaign,</i>	Music.
McLean, Walter Randolph,	<i>Macomb,</i>	Chemistry.
McLellan, Mary Clutha,	<i>Champaign,</i>	Art and Design.
McMillan, Mary Blanche,	<i>Homer,</i>	Household Science.
McMillen, James Foster	<i>Homer,</i>	Agriculture.
McMillen, Robert Ernest,	<i>Homer,</i>	Agriculture.
McMullan, Otha Guy,	<i>Idaville, Ind.,</i>	Agriculture.
Madden, Irwin Arthur,	<i>Freeport,</i>	Agriculture.
Manning, George Kingsley,	<i>Anderson, Ind.,</i>	General, L. and A.
Martin, Luta,	<i>Oakland,</i>	General, L. and A.
Masters, James Hillery,	<i>Jacksonville,</i>	Agriculture.
Meppen, William Henry,	<i>Dixon,</i>	Agriculture.
Meyer, George Henry,	<i>Havana,</i>	Agriculture.
Meyer, Mrs. Susie,	<i>Macomb,</i>	Music.
Miller, Clarence Benwell,	<i>Boswell, Ind.,</i>	Electrical Eng'g.
Moehrs, Louis William,	<i>Leanderville,</i>	Agriculture.
Montgomery, John Theodore, Jr.,	<i>Charleston,</i>	Agriculture.
Moore, John Beverly,	<i>Benton,</i>	Prep. to Med.
Moratz, Arthur,	<i>Bloomington,</i>	Architecture.
Morris, Keith Gardner,	<i>Rantoul,</i>	Agriculture.
Mosiman, Clara,	<i>Morton,</i>	General Science.
Moynihan, Charles Joseph,	<i>White Hall,</i>	General, L. and A.
Mozley, John Ladd,	<i>Vienna,</i>	Agriculture.
Nettleton, Ernest Brown,	<i>Ashton,</i>	Civil Eng'g.
Newcomb, William Wilson,	<i>Champaign,</i>	Agriculture.
Nicholson, William Nelson,	<i>Chicago,</i>	Architectural Eng'g.
Norton, William R,	<i>Neponset,</i>	Agriculture.
Noyes, Caleb Kirby,	<i>Champaign,</i>	Electrical Eng'g.
O'Connell, Nellie E,	<i>Champaign,</i>	Music.
Odernheimer, Virginia Chester,	<i>Champaign,</i>	Household Science.
Oldham, Mrs. Florence Huldah,	<i>Urbana,</i>	Music.
O'Neal, Fred Raggan,	<i>Arnold,</i>	Agriculture.
Opfergelt, Edward Albert,	<i>Woodstock,</i>	Architecture.
Opperman, Anna Lizzetta,	<i>Cullom,</i>	Household Science.
Ordell, Franklin,	<i>Philo,</i>	Mechanical Eng'g.
Paden, James Carl,	<i>Hillsboro,</i>	Agriculture.
Padfield, Frank Wilbur,	<i>Carlinville,</i>	Electrical Eng'g.
Parke, Mila,	<i>Sycamore,</i>	Household Science.
Patton, Harriet Eliza,	<i>Palestine,</i>	General, L. and A.
Peacock, Lottie Belle,	<i>Urbana,</i>	Music.
Penman, Thomas Abraham,	<i>Philo,</i>	Agriculture.

Perry, Edna Maude,	<i>Cornell,</i>	Art and Design.
Peters, Marie Edith,	<i>Urbana,</i>	General, L. and A.
Pfeffer, Frank,	<i>Champaign,</i>	Agriculture.
Phillips, Albert Vernon,	<i>Sullivan,</i>	Agriculture.
Picard, Armand,	<i>Chicago,</i>	Civil Eng'g.
Pinnell, Homer,	<i>Kansas,</i>	Agriculture.
Pitts, George Walter,	<i>McLean,</i>	Agriculture.
Pletcher, Adolph Benjamin,	<i>Trenton,</i>	Agriculture.
Popham, Edwin Sherman,	<i>Charleston,</i>	Agriculture.
Post, Ethel Ann,	<i>Fithian,</i>	Music.
Powell, Arthur Llewellyn,	<i>Bowen,</i>	Agriculture.
Powell, Clure Morris,	<i>Bowen,</i>	Civil Eng'g.
Powers, Alice Josephine,	<i>Tiskilwa,</i>	Household Science.
Powers, Howard Cameron,	<i>Princeton,</i>	Agriculture.
Pratt, Fred Aurcher,	<i>Waterloo, Ia.,</i>	Architecture.
Prendergast, James Joseph,	<i>Chicago,</i>	Civil Eng'g.
Pricer, George Allen,	<i>Rossville,</i>	Mechanical Eng'g.
Prichard, Frederick Samuel,	<i>Ottawa,</i>	Agriculture.
Prutsman, Lucy Catharine,	<i>Urbana,</i>	Music.
Puckett, Claude Erwin,	<i>Stockton,</i>	Agriculture.
Raines, Noble,	<i>Hutsonville,</i>	Agriculture.
Read, Wilbur Charles,	<i>Piper City,</i>	Agriculture.
Reat, Ralf Warder,	<i>Urbana,</i>	Agriculture.
Reed, Edith Mae,	<i>Chicago,</i>	Household Science.
Reed, Rono,	<i>Janesville,</i>	General, L. and A.
Reeser, Orrie,	<i>Farmer City,</i>	Agriculture.
Reeves, Howell Hiram,	<i>Champaign,</i>	Agriculture.
Reid, Carl Raymond,	<i>Farmer City,</i>	Agriculture.
Renfrew, Clara Eva,	<i>Urbana,</i>	Music.
Reno, John Franklin,	<i>Browning,</i>	Mechanical Eng'g.
Reynolds, Ernest Hunter,	<i>Tiskilwa,</i>	Agriculture.
Richmond, Wilson,	<i>Champaign,</i>	Agriculture.
Risser, Ruby Blanche,	<i>Blandinsville,</i>	General, L. and A.
Ritter, Lorah Katherine,	<i>Villa Grove,</i>	Art and Design.
Robinson, Mrs. Elinor Corse,	<i>Urbana,</i>	Music.
Rockwell, Calvin Albert,	<i>Chicago,</i>	Agriculture.
Roessler, Luther Martin,	<i>Shelbyville,</i>	Agriculture.
Rohrer, Minnie Genevieve,	<i>Somonauk,</i>	General, L. and A.
Rose, Rebecca Ann,	<i>Windsor,</i>	Art and Design.
Ross, Ford,	<i>Elgin,</i>	Agriculture.
Rothgeb, Claude James,	<i>Milford,</i>	Agriculture.

Rudy, Franklin, M. D., (*Ind. Med.*

<i>Coll.</i>) 1892,	<i>Champaign,</i>	Music.
Ruggles, Henry Paul,	<i>St. Louis, Mo.,</i>	Civil Eng'g.
Russell, George Washington,	<i>Homer,</i>	Mechanical Eng'g.
Salmon, Carl Preble,	<i>St. Louis, Mo.,</i>	General, L. and A.
Salyers, Roland,	<i>Monticello,</i>	General, L. and A.
Sammis, Mrs. Flora Elizabeth,	<i>Champaign,</i>	Music.
Sanford, Elbert Harmon,	<i>Polo,</i>	Agriculture.
Saxton, Eva Iola,	<i>Prescott, Wash.,</i>	Music.
Schober, Max William,	<i>Green Bay, Wis.,</i>	Architecture.
Schreiber, Otto William,	<i>Chicago,</i>	Business, L. and A.
Schrotberger, Curtius Julius,	<i>Gardner,</i>	Agriculture.
Schucker, Henry Edgar,	<i>Mt. Carmel,</i>	Architecture.
Seddon, Herbert Roy,	<i>Kansas City, Mo.,</i>	Architecture.
Sexauer, Hilda Christine,	<i>Belvidere,</i>	Household Science.
Shaw, Guy Loren,	<i>Rockport,</i>	Agriculture.
Sheetz, Roscoe Martin,	<i>Freeport,</i>	Agriculture.
Shepherd, Jacob Henry,	<i>Urbana,</i>	Agriculture.
Shipley, Alta Irene,	<i>Petersburg,</i>	Music.
Short, Henry Clifford,	<i>Neoga,</i>	Business, L. and A.
Short, Ralph Moody,	<i>Hillsboro,</i>	Agriculture.
*Shurtz, Mrs. May Gooding,	<i>Champaign,</i>	Music.
Sigler, Mrs. Pearl,	<i>Kempton,</i>	Music.
Silliman, Minott,	<i>Toulon,</i>	Agriculture.
Simmerman, Roy Franklin,	<i>Wyoming,</i>	Agriculture.
Simpson, Edith Elnora,	<i>Lincoln,</i>	Household Science.
Simpson, Frank,	<i>Pana,</i>	Agriculture.
Simpson, John Alexander Logan,	<i>Pana,</i>	Agriculture.
Smalley, Edwin Wesley,	<i>Tolona,</i>	Agriculture.
Smiley, Mabel,	<i>Lansing, Mich.,</i>	Music.
Smith, Daisy Frances,	<i>Auburn,</i>	Music.
Smith, Erasmus Edward,	<i>Modena,</i>	Business, L. and A.
Smith, Fleda Mary,	<i>Urbana,</i>	Household Science.
Smith, Mrs. Mabel,	<i>Urbana,</i>	Music.
Smith, Rufus William,	<i>Urbana,</i>	Agriculture.
Smith, Verna Marcella,	<i>Champaign,</i>	Household Science.
Smith, William Edmund,	<i>Rock Island,</i>	Mechanical Eng'g.
Snelling, John Francis,	<i>Loda,</i>	Agriculture.
Snyder, Ferdinand Peter,	<i>Charleston,</i>	General, L. and A.
Soule, Elmer Frederick,	<i>St. Albans, Vt.,</i>	Agriculture.

*Deceased.

Sowers, Elic,	<i>Urbana,</i>	Agriculture.
Spalding, Mrs. Clara Belle,	<i>Champaign,</i>	Music.
Spalding, Coit Warren,	<i>Elburn,</i>	Agriculture.
Spear, William Roy,	<i>Mason City,</i>	Agriculture.
Spencer, Eugene,	<i>Vandalia,</i>	Agriculture.
Sprecher, Irvin Sherwood,	<i>Zion City,</i>	Agriculture.
Stanford, Howard Russel,	<i>Chatsworth,</i>	Agriculture.
Stanner, Guy William,	<i>Mayview,</i>	Agriculture.
Staples, Oren Elmer,	<i>Champaign,</i>	Music.
Stebbins, Roy,	<i>Summer Hill,</i>	Agriculture.
Stewart, Harold Wilson,	<i>Hebron,</i>	Agriculture.
Stewart, Jennie Margaret,	<i>Genoa,</i>	Music.
Stewart, Robert Wright,	<i>Hebron,</i>	Agriculture.
Stine, Guy Edward,	<i>Sumner,</i>	Agriculture.
Stocker, Cornelius,	<i>Highland,</i>	Agriculture.
Storm, Clarence Monroe,	<i>Lockport,</i>	Agriculture.
Storm, Walter Andrew,	<i>Lockport,</i>	Agriculture.
Stout, Samuel Philemon,	<i>Springfield,</i>	Agriculture.
Strehlow, Clara Christian,	<i>Champaign,</i>	Music.
Streid, Joseph Benjamin,	<i>Metamora,</i>	Prep. to Medicine.
Swan, Archie Elmer,	<i>Waynesville,</i>	Agriculture.
Swango, Jesse Hervey,	<i>Paris,</i>	Agriculture.
Swayne, Juliet Robinson,	<i>Richmond, Ind.,</i>	Music.
Swezey, Anne Davies,		
B. L. S. 1903,	<i>Hinsdale,</i>	General, L. and A.
Swisher, Samuel Porter,	<i>Mendota,</i>	Agriculture.
Taylor, Blanche,	<i>Danville,</i>	Music.
Taylor, Joseph Walkinshaw,	<i>Chicago,</i>	Mechanical Eng'g.
Taylor, Ralph Mac,	<i>Watertown,</i>	Civil Eng'g.
Thomas, Jennie Insley,	<i>Homer,</i>	Household Science.
Thompson, Ethel Agnes,	<i>Bloomington,</i>	Household Science.
Thornton, Etta Pearl,	<i>Sadorus,</i>	Art and Design.
Thornton, Sara,	<i>Sadorus,</i>	Household Science.
Timmons, John Suver,	<i>Monticello,</i>	Agriculture.
Townsend, Carl Randolph,	<i>River Forest,</i>	Agriculture.
Treichel, Henry George,	<i>Chicago,</i>	Electrical Eng'g.
Trevett, Bessie Harriette,	<i>Champaign,</i>	Music.
Trotter, Archibald Carroll,	<i>Kansas,</i>	Agriculture.
Truman, Brook Halley,	<i>Urbana,</i>	Agriculture.
Truman, Laurel,	<i>Urbana,</i>	Agriculture.
Truman, Lenora,	<i>Urbana,</i>	Art and Design.

Tullock, George Albert,	<i>Rockford,</i>	Agriculture.
Tullock, Warren Milne,	<i>Rockford,</i>	Agriculture.
Turner, Rufus Presley,	<i>Quincy,</i>	Agriculture.
Vaniman, Vernon,	<i>Viriden,</i>	Agriculture.
Van Meter, Helen Jane,	<i>Urbana,</i>	Architectural Eng'g.
Wade, Oliver A,	<i>Chenoa,</i>	Agriculture.
Walkden, Chester Arthur,	<i>Elyria, O.,</i>	Agriculture.
Wall, Lillian May,	<i>Champaign,</i>	General, L. and A.
Wall, William Robert,	<i>Oblong,</i>	Agriculture.
Wallace, David Alexander,	<i>Creston, O.,</i>	Civil Eng'g.
Walls, James Edwin,	<i>Chicago,</i>	Agriculture.
Walsh, Anna Agnes,	<i>Urbana,</i>	Music.
Ward, Lester Earl,	<i>Decatur,</i>	Agriculture.
Wardell, Edna Annetta,	<i>Urbana,</i>	Music.
Warder, Evelyn,	<i>Marion,</i>	Household Science.
Ware, Josiah William,	<i>Riverside,</i>	Agriculture
Warlow, Arthur Bower,	<i>Bloomington,</i>	Agriculture
Warnock, David Wallace,	<i>Moline,</i>	Chemistry.
Warrick, Theron Lloyd,	<i>Utica,</i>	Agriculture.
Washburn, Samuel Edward,	<i>Fairmount,</i>	Mechanical Eng'g.
Watson, Arabella Grace,	<i>Chicago,</i>	Household Science.
Waughtel, Mrs. Nellie Elizabeth,	<i>Cuba,</i>	Household Science.
Wear, James Carl,	<i>Plymouth,</i>	Agriculture.
Weaver, Gaylord Evert,	<i>Springfield,</i>	Mechanical Eng'g.
Webster, Edward Fanning,	<i>Rantoul,</i>	Agriculture.
Weiser, Charles Philip,	<i>Stonington,</i>	Agriculture.
Wells, Minnie Opal,	<i>Urbana,</i>	Art and Design.
West, James Harvey,	<i>Sidney,</i>	Agriculture.
Wheeler, Hiram Hannibal,	<i>Chicago,</i>	Agriculture.
Wheeler, Walter John,	<i>Sinclair,</i>	Agriculture.
Wherry, John Llewellyn,	<i>River Forest,</i>	Agriculture.
White, Leila,	<i>Fairmount,</i>	General, L. and A.
White, Lena Lee,	<i>Urbana,</i>	General, L. and A.
Whitmore, Harold,	<i>Mendota,</i>	Agriculture.
Wilcox, Roy Garfield,	<i>Herscher,</i>	Agriculture.
Wilder, Edson Alexander,	<i>Pontiac,</i>	Mechanical Eng'g.
Williams, Alpheus Americus,	<i>Valparaiso, Ind.,</i>	Civil Eng'g.
Williams, Frank Abner,	<i>Danville,</i>	Mechanical Eng'g.
Williams, Howard Carr,	<i>Richmond, Ind.,</i>	Architecture.
Wilson, John Guy, A. B., 1904,	<i>Champaign,</i>	General, L. and A.
Winders, Bess May,	<i>Urbana,</i>	General, L. and A.

Winter, Charles Joseph,	<i>Washington, Ia.,</i>	Agriculture.
Winter, Harry William,	<i>Alton,</i>	Architecture.
Wise, Elmer Jason,	<i>Potomac,</i>	Agriculture.
Wolf, Will Charles,	<i>Freeburg,</i>	Civil Eng'g.
Woodcock, Harriett Elizabeth,	<i>Champaign,</i>	Art and Design.
Woodin, Dwight E J,	<i>St. Joseph,</i>	Agriculture.
Wright, Carl,	<i>Assumption,</i>	Agriculture.
Wright, Judson Mason,	<i>Danville,</i>	Agriculture.
Yates, Thomas Monroe,	<i>Griggsville,</i>	Agriculture.

SUMMER TERM

Adair, Howard,	<i>Tolono.</i>
Allison, Ira Dent,	<i>Alpha.</i>
Alverson, Eva Luella,	<i>Champaign.</i>
Alverson, Grace Margaret,	<i>Champaign.</i>
Baldwin, Frank D,	<i>Ipava.</i>
Beecher, Howard Benjamin,	<i>Peoria.</i>
Bent, Charles Howard,	<i>Chicago.</i>
Bickerdike, Margaret Daisy,	<i>Griggsville.</i>
Blackburn, Etta,	<i>Jacksonville.</i>
Bland, Rose,	<i>Normal.</i>
Block, Walter Robert,	<i>Champaign.</i>
Boice, Mrs. Harriet Eliza,	<i>Champaign.</i>
Boon, Grace,	<i>Urbana.</i>
Bradley, Edna Louis,	<i>Champaign.</i>
Braman, Olive Ruth,	<i>Urbana.</i>
Brannen, Agnes Margaret,	<i>Champaign.</i>
Breedlove, Charles,	<i>Urbana.</i>
Briscoe, Charles Francis,	<i>Hoopeston.</i>
Broadhead, Annie Maple,	<i>Normal.</i>
Bronson, Frank Lloyd,	<i>Streator.</i>
Bronson, George Durrill,	<i>Urbana.</i>
Brooks, Edwin Bruce,	<i>Atwood.</i>
Brower, Lyle Ireneus, B. S., 1898,	<i>Springfield.</i>
Brown, Ollie May,	<i>Urbana.</i>
Bullard, Benjamin Franklin, B. L., 1882,	<i>Dixon.</i>
Bullock, Jessie Jane, A. B., 1900,	<i>Champaign.</i>
Bumstead, Frank Melvin,	<i>Dundee.</i>
Busey, Carolyn Elizabeth,	<i>Urbana.</i>
Busey, Frank Augusta,	<i>Urbana.</i>

Butzow, Louis James,	<i>Sidney.</i>
Cairns, William Robert,	<i>Hebron.</i>
Cavins, Elzy Cartwright,	<i>Mattoon.</i>
Cavins, Lorimer Victor,	<i>Mattoon.</i>
Clark, Mrs. Alice Virginia, A. B., 1891,	<i>Urbana.</i>
Clark, Ella Hazel,	<i>Roswell, N. M.</i>
Coffey, Walter Castillia,	<i>Champaign.</i>
Coggshall, Lester B,	<i>Ridgefarm.</i>
Cole, Alice Maude,	<i>Ottawa.</i>
Coler, Lewis Anthony,	<i>Denver, Colo.</i>
Colvin, Grace Stella,	<i>Normal.</i>
Cook, Thomas L,	<i>Mt. Pulaski.</i>
Cordiner, Lucy,	<i>Laramie, Wyo.</i>
Craig, Stephen James,	<i>Wilmington.</i>
Craigmile, Eunice,	<i>Gifford.</i>
Craigmile, Mary Agnes,	<i>Gifford.</i>
Crain, John Allen,	<i>Urbana.</i>
Crawford, Joseph Henry,	<i>Prairie View, Tex.</i>
Crossland, George Marshall,	<i>Sheldon.</i>
Curtiss, Albert Root,	<i>Urbana.</i>
Daugherty, Anna Elizabeth,	<i>Champaign.</i>
Davis, Forrest Spurgeon,	<i>Urbana.</i>
Davis, Wilbert Harlin,	<i>St. Joseph.</i>
Davison, Anna Mary,	<i>Monticello.</i>
Day, Philip Miller, Jr.,	<i>Weldon.</i>
De Puy, Jessie Maude,	<i>Urbana.</i>
De Puy, Orval Carl,	<i>Urbana.</i>
Doran, Edwin Wortham, Ph. D., (<i>Cumberland Univ.</i>) 1890,	<i>Champaign.</i>
Edwards, Walter Owen,	<i>Coffeen.</i>
Elden, Ralph Waldo,	<i>Lake Forest.</i>
Engelskirchen, Nellie,	<i>Springfield.</i>
Enlow, Lena,	<i>Chicago.</i>
Fairweather, Charles Arthur,	<i>McLeansboro.</i>
Ferrell, Minnie,	<i>Carterville.</i>
Frey, Earl,	<i>Freeport.</i>
Fritter, Enoch Abraham, A. B., (<i>Findlay Coll.</i>) 1898,	<i>Normal.</i>
Garlough, Carl D, A. M., (<i>Hillsdale Coll.</i>), 1900.	<i>Stanford.</i>
Gates, Orus Ethan,	<i>Tuscola.</i>

Gay, Mary Louise,
 Goff, Mary, A. B., 1901,
 Goll, George Gerald,
 Gore, Adolph,
 Gorham, Edward Doremus,
 Graham, Louise,
 Graves, John Thomas,
 Grimes, Roy,
 Groves, Clifton Cooper,
 Gutman, Ludwig, B. S., 1904,
 Haines, Mary Martha,
 Hall, Melbourne Theodore,
 Hammers, Lilian,
 Hanson, Earl Patton,
 Harper, Edith Elizabeth,
 Harris, Estelle,
 Harris, William,
 Hatchitt, Clarence Eugene,
 Hawkes, William,
 Hazen, Alice,
 Heaney, Arthur Noble;
 Heath, Nathaniel,
 Higinbotham, Pearl,
 Hill, Norman Haden,
 Hissong, John Logan,
 Howe, Mary,
 Howe, Paul Edward,
 Howser, Edith Beryl,
 Huff, Nolan Hynson,
 Hughes, Anna Raphael,
 Hughes, Smith Yule,
 Hunt, Jasper Newton, Jr.,
 Hussey, Bertha,
 Johanning, Paul Martin,
 Johnson, George Thompson,
 Johnson, Minnie,
 Jones, Florence Nightingale, Ph.D.
 (Univ. of Chicago.) 1903,
 Jones, Wallace Franklin,
 Kelso, Curtis Elmer,
 Kidder, Mrs. Ida Angeline,

Rockport.
Rantoul.
Chicago.
Marion.
Champaign.
Carmi.
Urbana.
Villa Grove.
Nashville.
Peoria.
Champaign.
St. Joseph.
Champaign.
Urbana.
Urbana.
Modesto.
Moweaqua.
Durand.
Eureka.
El Paso.
Quincy.
Champaign.
Champaign.
Mattoon.
Urbana.
Urbana.
Urbana.
Urbana.
Center.
Champaign.
Antioch.
Chicago.
Upper Alton.
Champaign.
Champaign.
Sandwich.

Chicago.
Wyoming.
Thomasboro.
Cedar Rapids, Ia.

Kinsey, Mrs. Alice Rich,	<i>Mackinaw.</i>
Kinsey, Leon Browning,	<i>Mackinaw.</i>
Koons, Guy Jink,	<i>Oakland.</i>
Kuehlcke, Otto,	<i>Davenport, Ia.</i>
Lanham, Mariam Elizabeth,	<i>Osceola, Ia.</i>
Leachman, Joseph Elgar,	<i>Tuscola.</i>
Leas, Frank,	<i>Urbana.</i>
Lego, Lulu Mackintosh, LL. B., 1903,	<i>Urbana.</i>
Leonard, Edith,	<i>Urbana.</i>
Lester, Bert,	<i>Mahomet.</i>
Littler, Sherman Henry,	<i>Potomac.</i>
Lockett, Lela,	<i>Clinton.</i>
Logan, Jane,	<i>Dyerville, Cal.</i>
Logan, Mary Edna,	<i>Dyerville, Cal.</i>
Logan, Una Mildred,	<i>Dyerville, Cal.</i>
Longenbaugh, Joseph Edson,	<i>Moweaqua.</i>
Lyle, Albert Francis,	<i>Arcola.</i>
Lynch, Mary Elizabeth,	<i>Urbana.</i>
McDaniel, Fannie May,	<i>Champaign.</i>
McDaniel, Lilie,	<i>Champaign.</i>
MacDonald, Walter Nimmons,	<i>Chicago.</i>
McLean, Mrs. Pearl,	<i>Champaign.</i>
McWilliams, Helen Louise, A. B., 1900,	<i>Champaign.</i>
Main, Roscoe Conkling,	<i>Pittsfield.</i>
Manford, Ruth,	<i>Champaign.</i>
Massey, Esther,	<i>Urbana.</i>
Miller, Alexander Austin,	<i>Aurora.</i>
Miller, Donald S,	<i>Geneva.</i>
Miller, Warner De Vore,	<i>Geneva.</i>
Moore, Roy Lewis,	<i>Eureka.</i>
Morris, Minnie,	<i>Champaign.</i>
Morton, James Harrison,	<i>Kewanee.</i>
Moulton, Charles Robert,	<i>Glen Ellyn.</i>
Mullikin, Mrs. Elizabeth,	<i>Champaign.</i>
Murphy, James Russell,	<i>Elkhart.</i>
Nichol, Hubert Leland,	<i>Urbana.</i>
Nickell, Lloyd Francis,	<i>White Heath.</i>
Nollen, Nell Alma,	<i>Atlanta.</i>
Nuckolls, Charles Morrison,	<i>Urbana.</i>
Ogihara, Tokujo,	<i>Tokio, Japan.</i>
Osborne, Merwyn Oliver,	<i>Champaign.</i>

Paisley, Elsie Jennie,	<i>Hillsboro.</i>
Palmer, George Merit,	<i>Galena.</i>
Parks, Mrs. Allie V,	<i>Urbana.</i>
Parks, Paul Lindley,	<i>Urbana.</i>
Parks, Ralph Milton,	<i>Urbana.</i>
Parr, Elizabeth,	<i>Urbana.</i>
Pearman, Arthur Columbia,	<i>Champaign.</i>
Pena, Joseph Rodriguez,	<i>Saltillo, Mex.</i>
Perrin, Flem Allen,	<i>La Harpe.</i>
Pilcher, Lela Gretchen,	<i>Streator.</i>
Pillsbury, Charles Stephen,	<i>Urbana.</i>
Prendergast, James Joseph,	<i>Chicago.</i>
Pricer, John Lossen,	<i>El Paso.</i>
Prutsman, Lucy Catherine,	<i>Urbana.</i>
Purtill, Carl Ritter,	<i>Charleston.</i>
Putting, Oscar John,	<i>Springfield.</i>
Ragsdale, James Harvey,	<i>Moweaqua.</i>
Retz, Louise Julia,	<i>Ottawa.</i>
Retz, Rosalie Mary,	<i>Ottawa.</i>
Rhoads, Ida Ruth,	<i>Champaign.</i>
Rice, Grover,	<i>Irving.</i>
Robinson, Samuel T,	<i>Hillsboro.</i>
Rutledge, Bertha,	<i>Le Roy.</i>
Sachse, William Gustavus,	<i>Morris.</i>
Schafmayer, Albert James,	<i>Scales Mound.</i>
Schiffbauer, Hans Walter Ernest,	<i>Benson.</i>
Schumacher, Tillie Joe, A. B., 1902,	<i>Champaign.</i>
Scott, Myra Verbena,	<i>Cairo.</i>
Shinn, William Ricketts,	<i>Mattoon.</i>
Shuck, Fred Vinton,	<i>Urbana.</i>
Simms, Edna Charlotte,	<i>Galesburg.</i>
Sloneker, Bertha,	<i>Hamilton, O.</i>
Smail, Ernest Delbert,	<i>Urbana.</i>
Smith, Bruce, A. B., 1901,	<i>Newman.</i>
Smith, Erasmus Edward,	<i>Modena.</i>
Smith, Fleda Mary,	<i>Onarga.</i>
Smith, Florence Mary, A. B., 1899,	<i>Hornellsville, N. Y.</i>
Smith, Josephine Lee,	<i>Urbana.</i>
Smith, Mabel,	<i>Urbana.</i>
Smith, Valentine,	<i>Urbana.</i>
Smith, Warren Elwood,	<i>Thompsonville.</i>

Smith, William Walter, A. B., 1900,	<i>Broadlands.</i>
Snider Earl Quinter,	<i>Cerro Gordo.</i>
Spencer, Charles Blakely,	<i>Champaign.</i>
Standard, William Logan,	<i>Lewistown.</i>
Stine, John Carl, A. B., 1903,	<i>Assumption.</i>
Stebbins, Roy,	<i>Summer Hill.</i>
Storm, Howard Charles,	<i>Lockport.</i>
Stowe, Loyd Richard,	<i>Greenville.</i>
Strehlow, Cornelia, A. B., 1903,	<i>Shermerville.</i>
Suter, Eliza,	<i>Rockford.</i>
Swartz, Mary Katherine,	<i>Urbana.</i>
Swartz, Wilmot,	<i>Galesville.</i>
Talbot, Mildred,	<i>Urbana.</i>
Taylor, Dalla Alice,	<i>Champaign.</i>
Taylor, Jay Corydon,	<i>Urbana.</i>
Teruel, Carlos Garcia,	<i>Mexico City, Mex.</i>
Thomas, Edgar Conrad,	<i>Geneva.</i>
Thompson, Francis,	<i>Pinckneyville.</i>
Threlkeld, Harry Laurence,	<i>Mt. Vernon.</i>
Timmons, William Milton,	<i>Spiceland, Ind.</i>
Tomm, Rosa Alvina,	<i>Delavan.</i>
Townsend, Rolla Edward,	<i>Marion.</i>
Trimble, Mary Lillian,	<i>Champaign.</i>
Vance, Mahlon Smith, A. B., 1904,	<i>Champaign.</i>
Van Meter, Mrs. Catherine Caborn,	<i>New Orleans, La.</i>
Vines, Edgar James,	<i>Hoopeston.</i>
Waggoner, Harry Dwight,	<i>Granite City.</i>
Wahl, Louis August, Jr.,	<i>Urbana.</i>
Wall, Maggie May,	<i>Cairo.</i>
Walter, Loretta,	<i>Cairo.</i>
Wardall, Edna Annetta,	<i>Urbana.</i>
Weaver, Gailard Evert,	<i>Springfield.</i>
Webster, Roy Franklin,	<i>Nokomis.</i>
Webster, Samuel Harvey,	<i>Rutan, Pa.</i>
Wham, George Dorrit,	<i>Olney.</i>
Whitten, Charles William,	<i>Urbana.</i>
Williamson, Byron,	<i>Urbana.</i>
Wilmington, Arthur Guy,	<i>Nunda.</i>
Wilson, Bernice Celia,	<i>Urbana.</i>
Wilson, George Harold,	<i>Urbana.</i>
Wilson, John Guy, A. B., 1904,	<i>Gays.</i>

Winders, Frank Ray,	<i>Urbana.</i>
Wise, Albert Thaddeus,	<i>Chatsworth.</i>
Wisehart, George Bancroft,	<i>Champaign.</i>
Wood, Harvey Chase,	<i>Mt. Pulaski.</i>
Wood, Lewis Hungerford,	<i>Oak Park.</i>
Wright, Gaius Emory,	<i>Champaign.</i>
Young, Anna Lou,	<i>Champaign.</i>
Young, Harry Harrison,	<i>Urbana.</i>
Yunk, Nellie Louisa,	<i>Sandoval.</i>

COLLEGE OF LAW

Third Year

Allen, Lawrence Thompson,	<i>Hoopeston.</i>
Boon, Harry Lehre, A. B., 1903,	<i>Urbana.</i>
Clendenin, George Morey,	<i>Springfield.</i>
Dewhirst, Harry Thomas,	<i>Olney.</i>
Doyle, Joseph Lemen,	<i>Champaign.</i>
Graham, James John,	<i>Springfield.</i>
Hittson, Charles Henry,	<i>Neoga.</i>
Horr, Ralph Ashley,	<i>Gibson City.</i>
Hughes, Clarence Wilbert, A. B., 1900,	<i>Urbana.</i>
Jarrett, Thomas Lewis,	<i>Divernon.</i>
Jordan, Frederick Dolbier, A. B., (<i>Harvard Coll.</i>) 1880; L. L. B., (<i>N. W. Univ.</i>) 1904,	<i>Shelbyville.</i>
McCoy, Charles Brooks,	<i>Marengo.</i>
Marley, James Abraham,	<i>Paris.</i>
Melin, Carl August,	<i>Springfield.</i>
Penwell, Frederick Bowman,	<i>Danville.</i>
Pond, Henry Everett,	<i>Greenville.</i>
Reid, Robin Roy,	<i>Greenville.</i>
Roseberry, Clarence Judson,	<i>Peoria.</i>
Sampson, William Edgar,	<i>Tice.</i>
Smith, Thomas Barrington Franklin,	<i>Carbondale.</i>
Wagoner, Ed Owen,	<i>Champaign.</i>
Ward, Ulysses Garfield,	<i>Shelbyville.</i>

Second Year

Beveridge, Glen Le Roy,	<i>Litchfield.</i>
Boyle, John Marshall,	<i>Roberts.</i>

Browder, Olin Lorraine,	<i>Mt. Vernon.</i>
Cantlin, Jacob,	<i>Tampico.</i>
Carey, William Joseph,	<i>Ivesdale.</i>
Eastman, Charles John,	<i>Winnetka.</i>
Emmerson, Raymond Jesse,	<i>Lincoln.</i>
Galeener, John Halbert,	<i>Vienna.</i>
Gordon, Joseph Hinckley, A. M. 1901,	<i>Vandalia.</i>
Gridley, Harry Normal, A. B., 1901,	<i>Virginia.</i>
Hardy, Guy Byron.	<i>Galesburg.</i>
Healy, William James,	<i>Rochelle.</i>
Holman, Thomas Worcester,	<i>Chicago.</i>
Kane, Fred Richard,	<i>Clarence, Iowa.</i>
Kimmel, Howard Elihu,	<i>Du Quoin.</i>
Knight, Earl John,	<i>Beardstown.</i>
McClurg, Walter Sim,	<i>Urbana.</i>
McConaughy, Edward Leon,	<i>Rochelle.</i>
McCormick, Evert Bruce,	<i>Champaign.</i>
Maxwell, Stoy Jackson,	<i>Robinson.</i>
Plummer, Charles Preston,	<i>Biggsville.</i>
Preihs, John Walter,	<i>Sandoval.</i>
Richards, Chester William,	<i>Urbana.</i>
Rodman, Robert,	<i>Hoopeston.</i>
Schulte, Charles Reinhart,	<i>Vandalia.</i>
Staker, Roy Montgomery,	<i>Clayton.</i>
Stelle, William Harrison,	<i>McLeansboro.</i>
Taylor, Thomas Varence, Jr.,	<i>Urbana.</i>
Walcott, Lloyd Vernon, A. B., 1903,	<i>Urbana.</i>
Wiley, Francis Rudolph, A. B., 1904,	<i>Sullivan.</i>
Williams, John Everett,	<i>Virden.</i>

First Year

Baldwin, Leslie Weaver,	<i>Lena.</i>
Benson, Arthur Chapman,	<i>Vienna.</i>
Brown, Earle Wesley,	<i>Genoa.</i>
Cairns, William Robert,	<i>Hebron.</i>
Carr, Arnold Plack,	<i>Trenton.</i>
Caton, Charles Hull,	<i>Ottawa.</i>
Cavanaugh, Bert Martin,	<i>Kewanee.</i>
Cherry, Clifford Allen,	<i>Oswego.</i>
Dayton, Daniel V,	<i>Paris.</i>

Doss, William Albert,	<i>Monticello.</i>
Essington, Thurlow Gault,	<i>Streator.</i>
Ewing, Charles Raymond,	<i>Macomb.</i>
Fellheimer, Frank McIntosh,	<i>Macomb.</i>
Filson, James Edwin,	<i>Champaign.</i>
Gannaway, Moody,	<i>Mattoon.</i>
Garland, Charles Walter,	<i>Chicago.</i>
Garm, Clarence Clifford,	<i>Beardstown.</i>
Garrett, Elmer Logan, A. B., 1904,	<i>Plymouth.</i>
Gray, Albert B,	<i>Urbana.</i>
Hales, Ralph Jose,	<i>Tolono.</i>
Hathaway, Dallas Clinton,	<i>Sheldon.</i>
Holaday, William Perry,	<i>Danville.</i>
Huffman, Charles Jones,	<i>Vienna.</i>
Lewis, Leonard Daniel,	<i>Champaign.</i>
Looney, Marion Augustus,	<i>Tishomingo, I. T.</i>
McGinley, William,	<i>Moweaqua.</i>
Matthews, Benjamin Hull,	<i>Pittsfield.</i>
Mercer, Rufus Seth,	<i>Centralia.</i>
Palmer, William Gay, A. B., 1901,	<i>Princeton.</i>
Penwell, Edward Enos,	<i>Danville.</i>
Perrin, Lorraine Nicolas,	<i>Belleville.</i>
Price, Benjamin Montague May,	<i>Champaign.</i>
Price, Lin William,	<i>Champaign.</i>
Rowand, Kile Edward,	<i>Sidell.</i>
Scruggs, Amos Potter,	<i>Springfield.</i>
Skinner, Will Kenneth,	<i>Griggsville.</i>
Smith, Earl De Witt,	<i>Shelbyville.</i>
Staker, Fred Merwyn,	<i>Clayton.</i>
Walker, George Richelieu,	<i>St. Louis, Mo.</i>
Whiteside, William Elmer,	<i>Joslyn.</i>
Woolridge, Eugene Blaine,	<i>Gifford.</i>
Wright, Edward Earl,	<i>Sullivan.</i>

SPECIALS

Beach, Harold Cecil,	<i>Vandalia.</i>
Cameron, Glen James,	<i>Peoria.</i>
Cessna, Albert Bergess,	<i>Danville.</i>
Cohen, Sydney Nathan,	<i>Urbana.</i>
Colby, Roy Ray,	<i>Beloit, Wis.</i>

Colvin, John Thomas,
 Dodd, Roy R,
 Ehr Gott, Otto Ameal,
 Ewan, William Clayton,
 Fairchild, Sherman De Witt,
 Galeener, Wilbur Fiske,
 Gulett, Noah,
 Hamilton, Julius Rugg,
 Haselwood, John Marion,
 Hickey, James Bernard,
 Hillyer, George Clinton,
 Kelley, William Ernest,
 Kendall, John Samuel,
 Lawyer, John C,
 Lill, Herbert Frederick,
 Millsaps, Robert P,
 Morrison, John Emery,
 Nelson, Nels Berdenieus,
 Olson, Clarence Roberts,
 Pitts, Lewis Edgar,
 Runck, Charles Allen,
 Schwartz, Chester Ray,
 Scott, John T,
 Sigler, Emanuel Christopher,
 Smith, Claude Earl,
 Tracey, Andrew Edward,
 Youle, John Wilber,
 Young, George James,

Urbana.
Anna.
Quincy.
Cuba.
Mexico, Mo.
Champaign.
Elizabethtown.
Champaign.
Blandinsville.
Urbana.
Rushville.
Muskegon, Mich.
Cobden.
Colchester.
Mascoutah.
Urbana.
Danvers.
Palo Alto, Calif.
Galva.
McLean.
Sheldon.
Elkville.
La Moille.
Kempton.
Flora.
Toluca.
Scales Mound.
Springfield.

COLLEGE OF MEDICINE

(College of Physicians and Surgeons, Chicago)

SENIORS

Agate, William Richard, A. B. (<i>Ohio Wesleyan Univ.</i>), 1901,	<i>Chicago.</i>
Alt, George Ludwig,	<i>Chicago.</i>
Andrews, Malcolm Percival,	<i>Lebanon.</i>
Antoine, Francis John,	<i>Lake Church, Wis.</i>
Armstrong, Edward Kent, M. D. (<i>Dearborn Medical College</i>), 1904,	<i>Chicago.</i>

Avery, Harold Le Roy,	<i>Aurelia, Ia.</i>
Ayres, Daniel Francis,	<i>Chicago Heights.</i>
Bagley, Henry Patterson,	<i>Chicago.</i>
Baker, Nellie M.,	<i>Onarga.</i>
Baldwin, Charles Frederick,	<i>Appleton, Wis.</i>
Ballou, Jesse,	<i>Pleasant View.</i>
Ballou, Justin Guy,	<i>Standford, Ky.</i>
Banks, Jesse Thomas,	<i>Connersville, Ind.</i>
Bartlett, Clayton Elmer,	<i>St. Paul, Minn.</i>
Bartlett, Walter E., M. D. (<i>P. and S., St. Louis</i>), 1893,	<i>Belle Plaine, Kas.</i>
Barr, William Hunter,	<i>Carroll, Ia.</i>
Bass, David Emmanuel, B. S. (<i>Wilberforce Univ.</i>), 1898,	<i>Circleville, O.</i>
Beck, Frederick Oswald, Ph. G. (<i>Northwestern Univ.</i>), 1899,	<i>Dubuque, Ia.</i>
Beebe, Arthur Herbert, M. D. (<i>Jenner Medical Coll.</i>), 1904,	<i>Chicago.</i>
Bond, Xenia Ethel, A. M. (<i>Salem, W. Va., Coll.</i>), 1902,	<i>Aberdeen, W. Va.</i>
Bowen, Fred Phelps,	<i>Richland Center, Wis.</i>
Bowles, E. Arthur, M. D. (<i>Detroit Homeopathic Coll.</i>), 1903,	<i>Detroit, Mich.</i>
Brethouwer, C. Gareld, M. D. (<i>Lincoln Medical Coll.</i>), 1901,	<i>Lenora, Kas.</i>
Brixey, James Carse,	<i>Chicago.</i>
Browne, John Payne,	<i>Chicago.</i>
Brown, Frederick,	<i>Coal City.</i>
Buchan, Edward James,	<i>Racine, Wis.</i>
Buckley, James Edward, D. D. S., Ph. G. (<i>Chicago Coll. Dental Surgery</i>), 1903; (<i>Philadelphia Coll. of Pharmacy</i>), 1886,	<i>Chicago.</i>
Burgess, Albert Ross,	<i>Belle Plaine, Kas.</i>
Burnside, Lyman Ambrose,	<i>Dolson.</i>
Busman, Herman, M. D. (<i>Harvey Medical Coll.</i>), 1903,	<i>Chicago.</i>
Butterfield, Forrest Russell,	<i>Chicago.</i>
Cady, Matthew Philander,	<i>Birnamwood, Wis.</i>
Cameron, Joseph Robert,	<i>Beaver City, Neb.</i>
Cannon, William Patrick,	<i>Chicago.</i>

- Caron, Walter, Ph. G. (*Univ. of Ill.*), 1900,
Chicago.
- Cary, Frank Taylor,
Darlington, Wis.
- Casey, William E., M. D. (*Marion-Sims-
Beaumont Coll.*), 1891,
Marion.
- Christenson, John August, A. B. (*Augus-
tana Coll.*), 1900,
Jamestown, N. Y.
- Clagett, Arthur Neville, B. D. (*Seabury
Divinity School*), 1899,
Newport News, Va.
- Clark, Charles Cornelius,
Neoga.
- Cole, Daniel Thomas,
Rantoul.
- Coleman, Stanley Ray,
Chicago.
- Conklin, Robert Earle,
Alma, Neb.
- Costanzo, James Joseph,
New Haven, Conn.
- Crawshaw, John Allen,
Carbondale.
- Crouch, James Adam,
Belle Prairie.
- Cuthbert, Fred Sheetz,
Hollandsburg, Ind.
- Dando, George H.,
Orland, Ind.
- Davies, Bertram Charles,
Downer's Grove.
- Davies, Harriet, A. B. (*Ripon Coll.*), 1901,
Eldorado, Wis.
- Davis, Floren Fred,
Jeffersonville.
- Dawes, Leonard Pratt,
Monroe Center, Wis.
- Dean, George Almarion,
Chicago.
- Decker, Arthur J. E., M. D. (*Central Med-
ical Coll.*), 1899,
Helena, Okla.
- Dodge, William Edward,
New York, N. Y.
- Dostal, Ferdinand Edward,
Chicago.
- Dowd, James Edward,
Rushville, Neb.
- Downs, Jirah Marston,
Waterville, O.
- Duhigg, James T.,
Des Moines, Ia.
- Dunshee, Vernon Amasa,
Mt. Carroll.
- Eagan, John Bernard,
Muscoda, Wis.
- Edwards, James Edward, A. B. (*Wofford
Coll.*), 1900,
Abbeville, S. C.
- Egan, John Joseph,
Chicago.
- Egan, Thomas Sylvester,
Lawlor, Ia.
- Egan, William Joseph,
Chicago.
- Eversmeyer, Benjamin Ernst,
Muscatine, Ia.
- Fara, Frank John,
Chicago.
- Farquhar, David Clifford,
West Brownsville, Pa.
- Fastabend, Frank Bernhardt,
Chicago.

Fitzgerald, David Henry,	<i>Fond du Lac, Wis.</i>
Fletcher, Archibald Gray,	<i>Orchard, Neb.</i>
Folckemer, Harry Rox,	<i>Camp Point.</i>
Forkin, George Edward,	<i>Chilton, Wis.</i>
Gadd, Edson Elisha, M. D. (<i>Bennett Medical Coll.</i>), 1902,	<i>Mitchellville, Ia.</i>
Gale, William V., Ph. G. (<i>Univ. of Buffalo</i>), 1900,	<i>Lodi, N. Y.</i>
Ganoe, Charles Virgil,	<i>Ogden, Ia.</i>
Garard, Justus Corbly,	<i>Whitely, Pa.</i>
George, William Adolph, Ph. G., B. S. (<i>S. Dak. Agricultural Coll.</i>), 1900, 1902,	<i>Gettysburg, S. D.</i>
Gernsey, Merritt Nelson,	<i>Chicago.</i>
Goetzing, Charles Frederick,	<i>Fergus Fall, Minn.</i>
Goodwin, Charles Edwin, M. D. (<i>Medical Dep't Univ. of Michigan</i>), 1883,	<i>Ithaca, Mich.</i>
Gordon, Edmund Stanislaus,	<i>Chicago.</i>
Gordon, J. Matt,	<i>Bolivar, Mo.</i>
Gore, Charles Philip,	<i>Lawrenceville, Ill.</i>
Grant, Oscar Emanuel, A. B. (<i>Augustana Coll.</i>), 1904,	<i>New Windsor.</i>
Gray, William Karg,	<i>Chicago.</i>
Greenwald, William Charles Edward,	<i>Whiting, Ind.</i>
Grout, Benjamin Chase,	<i>Chicago.</i>
Grove, Martin Melvin,	<i>Plainview, Minn.</i>
Hagans, Frank M.,	<i>Browning.</i>
Hahn, Emil,	<i>Cincinnati, O.</i>
Hammond, Walter Donald, M. D. (<i>Illinois Medical Coll.</i>), 1900,	<i>Isanti, Mich.</i>
Harner, Marshall William,	<i>Clay Center Kas.</i>
Harner, Romeo Catlin,	<i>Green, Kas.</i>
Hastings, Patrick Henry, Ph. G. (<i>Illinois Medical Coll.</i>), 1902,	<i>Bailey, Ia.</i>
Hattendorf, Jessie,	<i>Waterloo, Ia.</i>
Hayton, Arthur Russell,	<i>Battle Creek, Mich.</i>
Hedges, William Elias, A. B., M. D. (<i>Princeton Univ.</i>), 1898; (<i>Chicago Homoeopathic Coll.</i>), 1904,	<i>Chicago.</i>
Hiett, Alva,	<i>Monmouth.</i>
Higgins, Samuel George, B. S. (<i>Univ. of Wisconsin</i>), 1902,	<i>Sault Ste. Marie, Can.</i>

Hinds, Mrs. Anna Bolender,	Berwyn.
Hoag, Harry James,	S. Milwaukee, Wis.
Hoag, Robert Baldwin,	Danville, Cal.
Hoeve, Hubertus J. H.,	Chicago.
Hopkins, Fred Grant,	Chicago.
Hostetter, Abram,	Mt. Carroll.
Hovey, Clara Adella, M. D. (<i>Coll. of Medicine and Surgery</i>), 1903,	Chicago.
Jacks, Ruffin Barrow,	Nero, La.
Jacobs, John Martin, Jr., M. D. (<i>Illinois Medical Coll.</i>), 1904,	Chicago.
Jefferson, Harry Asbury,	Menominee, Wis.
Jerger, Joseph A.,	Sydney, Australia.
Johnson, Harold Herbert,	Wilton Junction, Ia.
Johnson, Henrietta Amanda,	Blair, Wis.
Jones, Fred Wade,	Chicago.
Jones, Griffith Moses,	Minneapolis, Minn.
Jones, John Branson,	Waynesville.
Kearney, James Francis,	Chicago.
Kelly, Charles Dilworth,	Chicago.
Kelso, Curtis Elmer,	Thomasboro.
Keyes, Harley Emmett,	Chicago.
Killeen, John Joseph, M. D. (<i>Jenner Medical Coll.</i>), 1904,	Chicago.
Klinck, John McClellan, M. D. (<i>Nat'l Medical Coll.</i>), 1904,	Chicago.
Kubricht, Theophilus,	Chicago.
Kuhn, Leroy Philip,	Chicago.
Lane, Henry, M. D. (<i>National Medical Coll.</i>), 1902,	Chicago.
Lang, Shirley Charles, M. D. (<i>Chicago Homeopathic Coll.</i>), 1903,	Rockport, Ind.
Lathrop, William Cumbach, M. D. (<i>Chicago Homeopathic Coll.</i>), 1902,	Chicago.
Lauterbach, William F.,	Dayton, O.
Lawyer, William Martin,	Ellendale, N. D.
Learned, Clare Sumner,	Chicago.
Levitin, Emil Zola,	Chicago.
Livingston, Joseph William,	Pelican Rapids, Minn.
Luesing, Albert, M. D. (<i>Harvey Medical Coll.</i>), 1903,	Chicago.

- Lundwall, Lawrence Svante Bernhard, B.
S. (Augustana Coll.), 1901, Brockton, Mass.
 McArthur, Charles Hartley, Ontario, Can.
 McConnell, Charles Asa, Hot Springs, Ark.
 McKay, John Alexander, Langdon, N. D.
 Mackoy, Frank William, Little, Ky.
 Magahy, Charles Alford, Chicago.
 Meeks, Clark Champlin, Pontiac.
 Melvin, Wheeler Hayes, Avalanche, Wis.
 Merritt, Charles Walter, Chicago.
 Merritt, Frank Waldo, Centerville, Ia.
 Mikkleson, Agnes, Chicago.
 Miller, Charles Archer, A. B. (*Univ. of*
Indiana), 1896, Princeton, Ind.
 Miller, George Edwards, Ireton, Ia.
 Miller, John Frederick, Olivet, S. D.
 Montgomery, William, Eau Claire, Wis.
 Moore, George Wilford, Kewaunee, Wis.
 Morden, Leone, Jefferson, Ia.
 Morrow, Nelson Case, B. S. (*Univ. of Illi-*
nois), 1904, Chicago.
 Mount, William Chalmers, Darlington, Wis.
 Murphy, Bernard E., Chicago.
 Murphy, Patrick A., Chicago.
 Myers, Louis Winfield, Argenta.
 Nicholson, Allan S., St. Paul, Minn.
 Okerstrom, Albert, A. B. (*Augustana*
Coll.), 1898, Anoka, Minn.
 Oldfield, Edwin Leuthold, M. D. (*Jenner*
Medical Coll.), 1904, Chicago.
 Olsson, Olof, A. B. (*Augustana Coll.*), 1900, Grand Rapids, Mich.
 O'Neill, Francis William, A. B. (*Univ. of*
Minnesota), 1902, Graceville, Minn.
 Palm, Carl August, Chicago.
 Palmer, Thomas Jefferson, Keokuk, Ia.
 Parke, George, Richland Center, Wis.
 Parmalee, Olin Earl, Petersburg, Mich.
 Perry, Benjamin, Ph. G. (*Univ. of Ill.*)
 1901, Melvin,
 Petersen, Henry C., Bethany, Cal.

- Peterson, Enoch Fred, Ph. G. (*Univ. of Ill.*), 1901; (*Chicago Coll. of Pharmacy*), 1901, Chicago.
- Pirosh, Sigmar, Chicago.
- Plank, Tilman Howard, M. D. (*Chicago Homeopathic Coll.*), 1896, Chicago.
- Plonske, Charles Julius, St. Paul, Minn.
- Powell, Clarence Day, Chicago.
- Powers, George J., Streator.
- Ranseen, Carl Matthew, B. S. (*Univ. of Wisconsin*), 1901, Chicago.
- Raynor, Melbourne, B. S. D. (*Ontario Agr'l Coll.*), 1899, Rose Hall, Ont., Can.
- Reed, William Henry, A. B. (*Univ. of Iowa*), 1900, Mankato, Kas.
- Renberg, Felix Herman, Chicago.
- Ricardo, Daniel E., M. D. (*Nat'l Medical Coll.*), 1904, Chicago.
- Riegel, Harrison Christian, Lightsville, O.
- Roach, Harry Andrew, Heart Prairie, Wis.
- Roach, Richard Morrison, M. D. (*Jenner Medical Coll.*), 1904, Chicago.
- Rodemeyer, Frederick Henry, Latimer, Ia.
- Roth, Albert Alexander, Chicago.
- Rudnick, Frederick, Ph. G. (*Chicago Coll. of Pharmacy*), 1893, Chicago.
- Runnels, David Scott, M. D. (*Chicago Homeopathic Coll.*), 1900, Merrill, Wis.
- Sarheim, Robert Karlson, Minneapolis, Minn.
- Savage, Robert Garfield, Chicago.
- Sayad, Elisha E., Orosminah, Persia.
- Schell, Charles Peter, Chicago.
- Schmidt, Charles Henry, Ph. G. (*Univ. of Ill.*), 1902, Chicago.
- Schoen, Charles Mathias, A. B. (*Marquette Coll.*), 1890, Milwaukee, Wis.
- Schroeter, Oscar Victor, Chicago.
- Schullian, Orie Frank, Quincy.
- Schultz, Louis, D. D. S. (*Chicago Coll. of Dental Surgery*), 1901, Chicago.
- Sethney, Henry Thomas, Norway, Mich.

Sexton, Ira J.,	<i>Chicago.</i>
Sherlock, Margaret,	<i>Martinsburg, Ia.</i>
Shimer, Frank Elmer,	<i>La Porte City, Ia.</i>
Sintzel, Rudolph Virchow,	<i>Niles Center.</i>
Slocumb, Maud Stephens,	<i>Keithsburg.</i>
Sloucumb, Hugh Henry,	<i>Winona, Minn.</i>
Smith, Orley Eugene, M. D. (<i>Bennett</i>	
<i>Medical Coll.</i>), 1902,	<i>Mukwonago, Wis.</i>
Sorell, Frank William,	<i>San Saba, Tex.</i>
Stangland, Arthur K.,	<i>Chicago.</i>
Stearns, Lester Miles,	<i>Oak Park.</i>
Steffen, Richard Charles,	<i>Chicago.</i>
Stevens, Roy George,	<i>Springfield, S. D.</i>
Stewart, John Hardin, Jr.,	<i>Exeter.</i>
Stough, Raymond Ward,	<i>Bryan, O.</i>
Stryker, Ralph Spencer,	<i>Chicago.</i>
Sturgeon, Clarence Everett,	<i>Clarion, Ia.</i>
Tannus, Tannus Ferris,	<i>Bloomington.</i>
Thomas, Victor Darwin, M. D. (<i>Jenner</i>	
<i>Medical Coll.</i>), 1902,	<i>Chicago.</i>
Tomkinson, William Scott,	<i>Kalamazoo, Mich.</i>
Tupper, Eugene E.,	<i>Chicago.</i>
Underwood, Frank,	<i>Chicago.</i>
Vanatta, Fay McVey,	<i>Randolph, Ia.</i>
Van Kirk, George Hiram,	<i>Leiters, Ind.</i>
Wagner, James Alois,	<i>Ossian, Ia.</i>
Wallace, Eugene,	<i>Wichita, Kas.</i>
Walsh, Joseph Mark,	<i>Yankton, S. D.</i>
Weideman, William George, M. D. (<i>Univ.</i>	
<i>of Michigan</i>), 1904,	<i>West Bay City, Mich.</i>
Weir, Silas Wilkin,	<i>West Union.</i>
Welch, Michael Charles, M. D. (<i>Bennett</i>	
<i>Medical Coll.</i>), 1902,	<i>Toma, Wis.</i>
Wentz, Herbert Bertram,	<i>Chicago.</i>
Werner, Charles Frank,	<i>Fond du Lac, Wis.</i>
Weyer, Ross Steele,	<i>Chicago.</i>
White, Eleanor Virginia Gwynne Inman,	
M. D. (<i>Barnes Medical Coll.</i>), 1904,	<i>Chicago.</i>
Wilkinson, Carl Hixson, M. D. (<i>Am. Coll.</i>	
<i>of Medicine and Surgery</i>), 1904,	<i>La Fayette, Ind.</i>
Willhite, Frank Vanatta,	<i>Grant City, Mo.</i>

Willits, Ira Raymond,	<i>Keithsburg.</i>
Willmering, Sena Louisa,	<i>Columbus City, Ia.</i>
Winsett, Clifford Vane, Ph. G., Ph. B. (<i>Drake Univ.</i>), 1901; (<i>Grinnell Coll.</i>), 1900,	<i>Waterloo, Ia.</i>
Wissig, Simon Leo,	<i>Chicago.</i>
Woltmann, Frederick,	<i>Neeper, Mo.</i>
Woolston, Wesley John,	<i>Geneva.</i>

JUNIORS

Abbott, Effie Louise,	<i>Dowagiac, Mich.</i>
Anderson, Alma Saraphia,	<i>Seattle, Wash.</i>
Ballance, Charles, Jr.,	<i>Peoria.</i>
Barrett, Fred Thomas,	<i>Chicago.</i>
Bauer, Frederick,	<i>Center Point, Ia.</i>
Beeson, Benjamin Barker,	<i>Chicago.</i>
Benson, Iver Simeon,	<i>Petersburg, Minn.</i>
Bent, Frank Homer,	<i>Wabash, Ind.</i>
Berglund, Simon, B. S. (<i>Augustana Coll.</i>), 1901,	<i>Marinette, Wis.</i>
Billingslea, Martin Taylor,	<i>Chicago.</i>
Boal, Daniel,	<i>Chicago.</i>
Bock, John Jay,	<i>Iowa Falls, Ia.</i>
Borckmans, Fernand Georges, B. S., (<i>Univ.</i> <i>of Brussels</i>), 1903,	<i>Brussels, Belgium.</i>
Boswell, Eli Baldwin,	<i>Boulder, Colo.</i>
Bowen, Jesse Clark,	<i>Maquoketa, Ia.</i>
Bowman, William Townzen, Ph. G. (<i>Univ.</i> <i>of Ill.</i>), 1898,	<i>Moweaqua.</i>
Bowsher, Frank Llewellyn,	<i>Greenville, O.</i>
Brewer, Ernest Franklin,	<i>Farmington.</i>
Brosseau, Jesse Edward, Ph. G., B. S. (<i>S.</i> <i>Dak. Agricultural Coll.</i>), 1900, 1901,	<i>Chicago.</i>
Brown, Harry Stafford,	<i>Noblesville, Ind.</i>
Brucker, Matthew William,	<i>Fond du Lac, Wis.</i>
Bybee, Addison,	<i>Rochester, Ind.</i>
Carman, Henry Ferrell,	<i>Anaconda, Mont.</i>
Cathcart, William Frederick,	<i>Chicago.</i>
Clark, Edward Harry,	<i>Vinton, Ia.</i>

Clement, Charles Clinton, A. B. (<i>Illinois Coll.</i>), 1901,	<i>Greenfield.</i>
Cohen, Hyman,	<i>Chicago.</i>
Cremin, William Joseph,	<i>New York, N. Y.</i>
Croft, Albert Joseph,	<i>Chicago.</i>
Cronin, John James,	<i>Chicago.</i>
Culver Delphia Mary,	<i>Glencoe.</i>
Cutler, Edwin,	<i>Preston, Idaho.</i>
Danek, Eric Jacob,	<i>Chicago.</i>
Davis, Robert Anthony,	<i>Chicago.</i>
Davis, Russell,	<i>Hanna, Ind.</i>
Dewey, Fred Girard,	<i>Moville, Ia.</i>
Dolan, William Morgan,	<i>Chicago.</i>
Doulierty, William Byrne, A. B. (<i>Univ. of Mississippi</i>), 1903,	<i>Coldwater, Miss.</i>
Duguid, James Henry	<i>Ray, Ind.</i>
Dunscombe, William Colby,	<i>Portland, Me.</i>
Dvorak, Georgiana Margaret,	<i>Chicago.</i>
Edgcomb, John Harold,	<i>Utica.</i>
Edison, Samuel Martin,	<i>Chicago.</i>
Egan, James John,	<i>Chicago.</i>
Fairhall, Leo Victor,	<i>Danville.</i>
Fast, Harry De Witt,	<i>Princeville.</i>
Feagler, Jesse P.,	<i>Waterloo, Ind.</i>
Fenton, Thomas Justine,	<i>Ames, Ia.</i>
Finney, Ernest Orion,	<i>Rankin.</i>
Fischer, Albert Michael,	<i>Jefferson, Wis.</i>
Flannery, Robert Emmet,	<i>Lone Rock, Wis.</i>
Flynn, Helen B.,	<i>Chicago.</i>
Fomon, Samuel,	<i>Chicago.</i>
Ford, Ernest Jason,	<i>Prairie Center.</i>
Furstman, Jacob Michael,	<i>Chicago.</i>
Garstang, Ira Clifford,	<i>Chicago.</i>
Glenn, Edward Andrew,	<i>Chicago.</i>
Grable, Harry George,	<i>Logansport, Ind.</i>
Grove, John Leon,	<i>Newton, Kas.</i>
Haeffner, Albert William	<i>Chicago.</i>
Halsey, Howard William,	<i>Milwaukee, Wis.</i>
Hamel, Clarence Earl,	<i>Milwaukee, Wis.</i>
Hanelin, William Benjamin,	<i>Chicago.</i>
Harper, Homer Benton,	<i>Hillsboro, O.</i>

Harris, Chester Ellis, A. M. (<i>Univ. of Illinois</i>), 1903,	Ogden.
Harris, Louis Julius,	Chicago.
Harris, Ray Rhinaldo,	Champaign.
Harwood, Dorsey Alford,	Ancona.
Hatfield, Lena, A. B. (<i>Simpson Coll.</i>), 1895,	Chicago.
Hawkinson, Oscar,	Millersburg.
Hayes, Karl Lowell,	Pleasant Plains.
Hayward, Martha,	Aurora.
Helwig, Alvin George,	Chicago.
Hench, John Madison,	Watsonville, Cal.
Higginbotham, Thomas Lafayette,	Creelsboro, Ky.
Hill, Armenia Sears,	Kansas City, Mo.
Hollis, John Claude,	Fond du Lac, Wis.
Holmes, Ralph Randall, A. B., A. M. (<i>Ill. Wesleyan Univ.</i>), 1895, 1898,	Bloomington.
Hoover, Enos Musser,	Nappanee, Ind.
Horn, Emmett Eugene,	Moulton, Ia.
Howard, Charles Earl,	Clermont, Ind.
Jackson, Charles Augustus,	Houston, Tex.
Jennings, Arthur G.,	New London, Wis.
Jewell, Earl Bowen,	Danville.
Kauffman, Edwin John,	Marion Junction, S. D.
Keller, Samuel Alvin,	Sioux Falls, S. D.
Kennelly, Frank Clair,	Easton.
Knappenberger, T. Gaillard,	Macomb.
Knowles, Edwin Winslow,	Macomb.
Konzelman, John Albert,	Chicago.
Kraus, Harry,	Chicago.
Krueger, Arthur Henry Richard,	Chicago.
Kuhn, Leslie Ambrose,	Chicago.
Langworthy, George Lucene,	Massena, Ia.
Lattimore, Joseph Carpenter,	Fallston, N. C.
Lawson, John Fonrose,	Neoga.
Lexa, Frank Joseph,	Wheatland, Minn.
Loofbourrow, Elias Homer,	New Madison, O.
Luken, Martin Girard,	Chicago.
Lutyens, George Benjamin,	Rochester.
McCord, William Charles, Jr.,	Allegheny, Pa.
McGillivray, Duffield Dufferin,	Muir, Mich.

McLane, George Albert,	<i>Whitewater, Wis.</i>
MacMillan, Lachlan,	<i>Vancouver, B. C.</i>
McMurray, Ray James,	<i>Francisville, Ind.</i>
Maher, Thomas Francis,	<i>Chicago.</i>
Miller, Leo Cassius,	<i>Princeville.</i>
Miller, Noble William,	<i>Chicago.</i>
Moldenhauer, William John,	<i>Des Plaines.</i>
Moore, Ralph Vernon,	<i>Chicago.</i>
Morrow, Louise,	<i>Rockford.</i>
Movius, Alfred Henry,	<i>Lidgerwood, N. D.</i>
Murphy, Elam Turner, A. B., A. M. (<i>Wabash Coll.</i>), 1899; (<i>Univ. of Indianapolis</i>), 1901,	<i>Crawfordsville, Ind.</i>
Murray, Dudley Ellis,	<i>Markle, Ind.</i>
Nathanson, Mrs. Charlotte Alden,	<i>Chicago.</i>
Nathanson, Joseph Lawrence,	<i>Chicago.</i>
Nebeker, Elbert Ferguson, Ph. G. (<i>Chicago Coll. of Pharmacy</i>), 1895,	<i>Chicago.</i>
Nee, Frank,	<i>Richland Center, Wis.</i>
Newell, Floyd William,	<i>Ottumwa, Ia.</i>
Novashelsky, Benjamin Sol,	<i>Chicago.</i>
O'Connell, John Patrick,	<i>Bloomington.</i>
O'Leary, Thomas Joseph,	<i>Wabasha, Minn.</i>
Olson, Alfred Louis,	<i>Stoughton, Wis.</i>
O'Neil, John Patrick,	<i>Chicago.</i>
O'Neil, William Edward, A. B. (<i>St. Ignatius Coll.</i>), 1902,	<i>Chicago.</i>
Osborn, George Robert,	<i>Hanna, Ind.</i>
Oughton, James Henry,	<i>Dwight.</i>
Parks, Samuel Joseph,	<i>Chicago.</i>
Parsons, Irving Wheeler,	<i>Chicago.</i>
Peters, Le Roy S.,	<i>St. Joseph, Mich.</i>
Peterson, Martin David Ephram,	<i>Paxton.</i>
Pettit, Herbert Leroy,	<i>Chicago.</i>
Pillinger, Bert Henry,	<i>Chicago.</i>
Pitz, Robert Henry,	<i>Chicago.</i>
Pollock, Lewis John,	<i>Chicago.</i>
Provine, George Sumner,	<i>Macomb.</i>
Pryor, Ray Ethelbert, A. B. (<i>Ouachita Coll.</i>), 1903,	<i>Camden, Ark.</i>
Rach, Emil Arthur,	<i>Mitchell, Wis.</i>

Rego, Alfred d'Almeida,	<i>St. Michael, Portugal.</i>
Rice, Merton Henry,	<i>Barron, Wis.</i>
Ries, Annie F.,	<i>Neeleyville, Mo.</i>
Rinkenberger, Frederick William,	<i>Tacoma, Wash.</i>
Robb, Charles Elbert,	<i>Rock Island.</i>
Robin, Samuel M.,	<i>Chicago.</i>
Rose, Joseph,	<i>Green Bay, Wis.</i>
Rosenzweig, Louis,	<i>Chicago.</i>
Ross, George William,	<i>Chicago.</i>
Ross, Robert Malcolm,	<i>Chicago.</i>
Rost, John Frederic Wilken,	<i>Petersburg.</i>
Rutkus, Anthony,	<i>Chicago.</i>
Salomon, Richard Sigmund Hau,	<i>Chicago.</i>
Sandven, Nels O.,	<i>Ames, Ia.</i>
Schaffarzick, Charles Frank, Ph. G. (<i>Univ.</i>	
<i>of Ill.</i>), 1901,	<i>Livingston, Mont.</i>
Schmidt, Lawrence Maurice,	<i>Belvidere.</i>
Schroeder, George Henry,	<i>Chicago.</i>
Schwartz, Mary,	<i>Chicago.</i>
Schwartz, Reinhard Fredrick,	<i>Lyons, Ia.</i>
Sharrer, Frank Leslie,	<i>Francisville, Ind.</i>
Shelly, Hargus Gerald,	<i>Mulvane, Kas.</i>
Siders, W. Bert,	<i>New Carlisle, Ind.</i>
Smith, Charles Kenneth,	<i>Kankakee.</i>
Smith, Harvey Le Roy,	<i>Sadorus.</i>
Smith, Lloyd Fisher,	<i>Chicago.</i>
Smith, William Lester,	<i>Toledo.</i>
Sorenson, Alfred Renhart, A. B. (<i>Luther</i>	
<i>Coll.</i>), 1902,	<i>Harmony, Minn.</i>
Standard, Alphonso Perry,	<i>Lewistown.</i>
Stevens, Fred Warner,	<i>Chicago.</i>
Stone, French Franklin,	<i>Chicago.</i>
Stull, Katherine,	<i>Auburn, Neb.</i>
Sunderland, William Eben,	<i>Cavette, O.</i>
Swindle, Robert Norris,	<i>Ryan, Ia.</i>
Szopinski, Aloysius,	<i>Chicago.</i>
Theobald, Frank John,	<i>Niles Center.</i>
Thomas, Harry Veder,	<i>Chillicothe.</i>
Thompson, Orris Martin,	<i>Ellsworth.</i>
Tillotson, Charles Homer,	<i>Chicago.</i>
Toren, Julius Arthur,	<i>Grand Rapids, Mich.</i>

Van Zant, Noble,	<i>Berrysville, O.</i>
Wagner, Frederic John,	<i>Chicago.</i>
Walters, William Alexander, B. S., (<i>Univ.</i> <i>of Wisconsin</i>), 1903.	<i>Chicago.</i>
Watkins, Rachel A.,	<i>Cambridge, Neb.</i>
West, William Butler,	<i>Chicago.</i>
Wickstrom, Albert Michael,	<i>Chicago.</i>
Williams, Horace Joseph,	<i>Battle Creek, Mich.</i>
Winkler, Frank Paul,	<i>Doon, Ia.</i>
Winsor, Richard Frederic,	<i>Neponset.</i>
Wood, William Walter,	<i>Chicago.</i>
Woodnick, George,	<i>Chicago.</i>
Woods, Bert Leslie Taylor,	<i>Chicago.</i>
Wynekoop, Gilbert Haven, B. S., (<i>North-</i> <i>western Univ.</i>), 1903,	<i>Chicago.</i>
Yampolsky, Rebecca Meriam,	<i>Chicago</i>

SOPHOMORES

Aaker, Adolph O.,	<i>Ridgeway, Ia.</i>
Abbott, Carroll Breed, D. D. S., (<i>Univ.</i> <i>of Ill.</i>), 1902.	<i>Oshkosh, Wis.</i>
Aimone, John,	<i>Toluca.</i>
Allison, Charles Newton,	<i>Good Hope.</i>
Andreen, Frank Godfrey, A. B., (<i>Lombard</i> <i>Univ.</i>), 1904.	<i>Woodhull.</i>
Bachman, Arthur Simon,	<i>Decatur.</i>
Ballard Charles Anson,	<i>Logansport, Ind.</i>
Bartholomew, Eric Kline,	<i>Chicago.</i>
Beers, Dana Nelson,	<i>St. Joseph, Mich.</i>
Birmingham, Eugene Emmett,	<i>Chicago.</i>
Bissell, Burt George,	<i>Chicago.</i>
Briggs, Francis Earl,	<i>Gibson City.</i>
Buckner, Arthur Jefferson,	<i>Hayden, I. T.</i>
Bulger, Charles Oliver,	<i>Gibson City.</i>
Bundy, Herman Winford,	<i>Lebanon, Ind.</i>
Clark, John Edward,	<i>Baraboo, Wis.</i>
Conser, William Henry,	<i>Galesburg.</i>
Coventry, Henry John Gavall,	<i>Chicago.</i>
Crofut, Martha Marilla,	<i>Chicago.</i>
Cunningham, Joseph Louis,	<i>Burlington, Wis.</i>

Curtis, William J. Demorest,	<i>Bailey, Mich.</i>
Davenport, George Luther,	<i>Chicago.</i>
Dinnen, James Francis,	<i>Ft. Wayne, Ind.</i>
Edmonson, Oscar Boone,	<i>Clinton.</i>
Eidam, Louis,	<i>Blue Island.</i>
Ferguson, Fred Harrison,	<i>Chicago.</i>
Ford, Ada,	<i>Mansfield, O.</i>
Forster, Arthur Leopold,	<i>Sterling.</i>
Franklin, Grover Cleveland,	<i>Clinton, S. C.</i>
Gahl, Otto Albert,	<i>Chicago.</i>
Graybeal, James,	<i>Ipava.</i>
Griffin, Francis Joseph,	<i>Butte, Mont.</i>
Gunn, William Parker,	<i>Janesville, Wis.</i>
Hageman, Silas Van,	<i>Pontiac.</i>
Hansen, Robert Rochester,	<i>Chicago.</i>
Hart, Esther Alice,	<i>Chicago.</i>
Hecht, M. Charles,	<i>Chicago.</i>
Henneberry, Thomas Jerome,	<i>Gilmore City, Ia.</i>
Hills, Robert A.,	<i>Mt. Pleasant, Ia.</i>
Horton, Clyde Switzer,	<i>Fennimore, Wis.</i>
Huston, Ross,	<i>Blandinsville.</i>
Jacobs, Joseph,	<i>Chicago.</i>
Jenkins, Hilerd Enno,	<i>Villisca, Ia.</i>
Jones, Charles Erwin, D. D. S., (<i>Illinois</i>	
<i>School of Dentistry</i>), 1900	<i>Chicago.</i>
Keith, Willis Elmer,	<i>Clinton, Ia.</i>
Kingsbury, Herman Buchanan,	<i>Pinkstaff.</i>
Leebens, John,	<i>Fulda, Minn.</i>
Lemmel, John Taggart,	<i>Evansville, Wis.</i>
Lovell, Arthur Irving,	<i>Milwaukee, Wis.</i>
Lovene, Arthur Wilhelm, A. B., A. M.,	
(<i>Augustana Coll.</i>), 1903, 1904.	<i>Tustin, Mich.</i>
Maguire, James Bernard,	<i>Chicago.</i>
Mautz, George John, A. B., (<i>Univ. of Illi-</i>	
<i>nois</i>), 1904.	<i>Pana.</i>
Mesirow, Maurice Elias,	<i>Chicago.</i>
Meyerovitz, Max,	<i>Chicago.</i>
Miller, Harry Clifford, B. S., (<i>Colo. Agri-</i>	
<i>cultural Coll.</i>) 1899.	<i>Hotchkiss, Colo.</i>
Mirabella, Salvador Frank Joseph.	<i>Chicago.</i>
Mitchell, Joseph Henry,	<i>Franklin, La.</i>

- Morrill, Warren Pearl, Ph. B., (*Univ. of Michigan*), 1898, Benton Harbor, Mich.
- Mueller, Albert Nicholas, Rock Island.
- Muirhead, Walter Scott, Chicago.
- Nathanson, Frank Louis, Chicago.
- Nelles, James Edward Earle, Chicago.
- Niles, Edward, A. B., (*St. Ignatius Coll.*), 1903, Chicago.
- Nilson, Betty Augustine, Rockford.
- Nyman, John Egbert, D. D. S., (*Chicago Coll of Dental Surgery*), 1892, Chicago.
- Olson, Nels Emmanuel, Rock Island.
- Peterson, Axel Emanuel, Chicago.
- Phillips, Nelson Chancellor, Lena.
- Port, Erwin Augustus, Wilton Junction, Ia.
- Reynolds, Hiram Farnum, Chicago.
- Richardson, Bertram Arthur, Pontiac.
- Rigterink, Herman A., Grand Rapids, Mich.
- Roads, Wilbur Berry, Hillsboro, O.
- Rodermund, Arthur Matthew, Milwaukee, Wis.
- Rose, Cameron Albert, Oak Park.
- Schiffbauer, Hans, Benson.
- Schock, Clarence, D. D. S., (*Northwestern Dental Coll.*) 1900, Monticello.
- Schrayer, Joseph, Chicago.
- Schwartz, Alfred Charles, Chicago.
- Seibert, Henry Hulse, Chicago.
- Seippel, Clara Pauline, Chicago.
- Sekler, Charlotte Margaretha, Princeton.
- Shearer, Ansley Thomas, Fennimore, Wis.
- Sher, Samuel George, Chicago.
- Siedenburg, Frank, Ph. G., (*Univ. of Ill.*), 1898, Elizabeth.
- Skebelsky, Jacob William, Chicago.
- Smith, George Mortimer, Eau Claire, Wis.
- Smith, Hiram Jay, Oakfield, Wis.
- Staley, Wilbert, Montgomery, Mich.
- Swan, Earl Berrie, Whiting, Ind.
- Thuerer, Edward Walter, B. L., (*Univ. of Wisconsin*), 1903, Baraboo, Wis.
- Tyler, Roy Homer, Valparaiso, Ind.

Unger, Charles,	<i>Rochelle.</i>
Wade, Robert Lavern,	<i>La Grange, Ind.</i>
Wagner, Earl Peter, Ph. G., Ph. C., (<i>Pur-</i> <i>due Univ.</i>), 1897,	<i>South Bend, Ind.</i>
Wakefield, William Bard,	<i>Heyworth.</i>
Wassom, George,	<i>Pontiac.</i>
Whitehill, John Emerson,	<i>Chicago.</i>
Wilson, Pitt Stevens,	<i>Bessemer, Mich.</i>
Wochos, Frank Joseph,	<i>Stangelville, Wis.</i>
Wolinsky, Maurice Benjamin,	<i>Chicago.</i>
Wood, Jay Thomas,	<i>Springfield.</i>
Woodcock, Albert Snyder,	<i>Byron.</i>

FRESHMEN

Ascott, George Walter, Ph. G., (<i>Univ. of</i> <i>Wisconsin</i>), 1895,	<i>Sheridan, Mont.</i>
Bates, Charles Richard,	<i>Camp Point.</i>
Berry, Frederick Amon,	<i>Pittsfield.</i>
Biwer, Edward Theodore,	<i>Lincoln.</i>
Brinckerhoff, Elmer Ellsworth,	<i>Lockport.</i>
Brown, Adelaide Follett,	<i>Chicago.</i>
Burkhart, Clinton Leonard,	<i>Oswego.</i>
Burnett, Wesley Edward, B. S. D., (<i>Lin-</i> <i>coln Inst.</i>), 1903,	<i>St. Louis, Mo.</i>
Clayton, Emanuel Harry,	<i>Dixon.</i>
Comee, William Clyde,	<i>Seymour, Wis.</i>
Conroy, Francis James,	<i>Chicago.</i>
Copeland, Hollestar Norman John,	<i>Chicago.</i>
Cullen, Clement Joseph,	<i>Chicago.</i>
Dennis, James Francis,	<i>Spickard, Mo.</i>
Dolan, John Edward,	<i>Kankakee.</i>
Donaldson, Henry Bardwell,	<i>Dixon.</i>
Dornblaser, Thomas Franklin,	<i>Chicago.</i>
Dowd, Richard Edward,	<i>Hastings, Neb.</i>
Eckman, John Wesley,	<i>Decatur.</i>
Epley, Clarence Oscar,	<i>Fayette, Ia.</i>
Evans, John Henry,	<i>Chicago.</i>
Fortin, William Henry,	<i>Chicago.</i>
Freitag, Matilda Mina,	<i>Stanford.</i>
Fugina, George Romeo,	<i>Fountain City, Wis.</i>

Gearin, Frank Emmett,	<i>Chicago.</i>
Gearin, John Joseph,	<i>Chicago.</i>
Gerety, William Francis,	<i>Danville.</i>
Gilbert, Lenny Clifford,	<i>Oakland.</i>
Goembel, Emery Wells,	<i>Geneseo.</i>
Goldberger, Sollie Maxwell,	<i>Whiting, Ind.</i>
Gollobith, Edward Frank,	<i>Baldwin, Ia.</i>
Gour, Andrew Anastas,	<i>Marlborough, Mass.</i>
Grinde, George Allen, A. B., (<i>Luther College</i>), 1903,	<i>Morrisonville, Wis.</i>
Hagen, Selma M.,	<i>Chicago.</i>
Hagie, Franklin Eugene,	<i>Elizabeth.</i>
Hartung, Adolph,	<i>Chicago.</i>
Hendrickson, Oron Matthias,	<i>Rochester, Ind.</i>
Hennig, Ernst Louis,	<i>Oshkosh, Wis.</i>
Henry, Nina Cornelia,	<i>St. Louis, Mo.</i>
Herren, Christie Calvin,	<i>Oswego.</i>
Hicks, George Joseph,	<i>Joliet.</i>
Hosman, Sarah Longworth,	<i>Newberg, Ind.</i>
Hovenden, Mrs. Louise Marshall,	<i>Chicago.</i>
Hughes, W. T.,	<i>Yankton, S. D.</i>
Hutchison, Charles Wesley,	<i>Ames, Ia.</i>
Ishmael, Oscar,	<i>Cassville, Wis.</i>
Joyce, Thomas Mathias,	<i>Waterloo, Wis.</i>
Kelly, Andrew Cyril,	<i>Charles City, Ia.</i>
Kunny, Bartholomew,	<i>Fredoria, Wis.</i>
Lalor, Joseph Clinton,	<i>Oregon, Wis.</i>
Lederer, Arthur,	<i>Chicago.</i>
Lee, Alice Lulu,	<i>Sioux Falls, S. Dak.</i>
Lee, Newton Deyoe,	<i>Chicago.</i>
Lescher, Edwin Russell,	<i>Mt. Carmel.</i>
Lunn, Jacob Osmond,	<i>Chicago.</i>
McCabe, Bernard Vincent,	<i>Helena, Mont.</i>
McCormick, Roscoe S., B. S., (<i>Univ. of Ill.</i>), 1901,	<i>Idaho City, Idaho.</i>
McLallen, Rob Roy,	<i>Aurora.</i>
Marion, Norman Edward,	<i>Aurora.</i>
Martin, Harry Bond,	<i>Rochester, N. Y.</i>
Meyer, Carl Albert,	<i>Gilman.</i>
Mikkleson, Edward Michael,	<i>Chicago.</i>
Moran, James Michael,	<i>Manhattan.</i>

Mosser, Robert, Ph. G., (<i>Chicago Coll. of Pharmacy</i>), 1891,	<i>Chicago.</i>
Nathanson, William,	<i>Chicago.</i>
Neer, Wilmer Young,	<i>Taylorville.</i>
Noger, George Joseph,	<i>Chicago.</i>
Norris, Samuel Brown,	<i>Anna.</i>
Nowack, Louis Henry,	<i>Watertown, Wis.</i>
Nussle, Albert Charles,	<i>Chippewa Falls, Wis.</i>
O'Connell, Mrs. Sarah Conley,	<i>Chicago.</i>
O'Donnell, Charles Peter,	<i>Chicago.</i>
Ochsner, Rudolph John, B. S., (<i>Univ. of Wisconsin</i>), 1894,	<i>Cleveland, O.</i>
Parks, Mrs. Jennie Winship,	<i>Cuba.</i>
Pearce, Warren Frederick,	<i>Quincy.</i>
Phifer, Frank Marion,	<i>Shumway.</i>
Quigley, Timothy Charles, A. B., (<i>St. Ignatius Coll.</i>), 1904.	<i>Chicago.</i>
Ranson, Roy Ainsworth,	<i>Havana.</i>
Reese, Forrest Leslie,	<i>Paris.</i>
Ritchie, Fannie Rankin,	<i>St. Louis, Mo.</i>
Ritchie, Herbert Samuel,	<i>New London, Wis.</i>
Ruh, Harold Oliver,	<i>Rochester, Ind.</i>
Sandstrom, George,	<i>Chicago.</i>
Schroeder, John Cleveland,	<i>Half Day.</i>
Schuessler, Augustus William,	<i>Joliet.</i>
Schultz, Ione,	<i>Delphi, Ind.</i>
Silverberg, Charles William,	<i>Chicago.</i>
Skwor, Charles James,	<i>Kellnersville, Wis.</i>
Spear, John Frank,	<i>Mason City.</i>
Spencer, George Joseph,	<i>Chicago.</i>
Stahl, August Ferdinand, Jr.,	<i>Chicago.</i>
Stawicki, John Paul,	<i>Chicago.</i>
Thometz, Francis Peter, A. B., (<i>St. Ignatius Coll.</i>), 1904,	<i>Chicago.</i>
Thurber, Harry Robert,	<i>Yorkville.</i>
Tucker, George Millard,	<i>Watseka.</i>
Vance, James St. Clair,	<i>Bement.</i>
Vandermade, Jay Astor,	<i>Chicago.</i>
Wallace, James Henry,	<i>Ft. Wayne, Ind.</i>
Wiles, George John Berkman,	<i>Rochester, N. Y.</i>
Wilson, Frederic Riley,	<i>Richland, Ore.</i>

Wood, Annie,	Chicago.
Wood, Eulalie,	St. Louis, Mo.
Worthing, Irvin Edwin,	West Webster, N. Y.

SPECIALS

Blum, Joseph Markus,	Chicago.
Brazier, A. Walter, M. D., (<i>Flint Medical Coll.</i>), 1905,	Hahnville, La.
Bucanan, William Betzer, A. B., (<i>Fisk Univ.</i>), 1899,	Decatur.
Dillingham, Willis Irving, M. D. V., (<i>Harvard Univ.</i>) 1899,	Chicago.
Goudreau, Arthur David, A. B., (<i>St Viator's Coll.</i>), 1902,	Kankakee.
Gindele, George William,	Chicago.
Grissom, Milton Absalom,	Cape Girardeau, Mo.
Hall, Hugh M., M. D., (<i>Univ. of Ill.</i>), 1898,	Bristol, Ind.
Henderson, Francis Harold,	Colfax.
Hendricks, Alfred Hudson, A. B., (<i>Fisk Univ.</i>), 1904,	Macon, Ga.
Henry, James Montgomery, M. D., (<i>Coll. of Physicians and Surgeons of Chicago</i>), 1885,	Payson, Utah.
Howell, James, A. S.,	Chicago.
Humiston, Myrtle Wheeler, B. S., A. M., (<i>Univ. of Nebraska</i>), 1896, 1901,	Austin.
Katherman, Charles Augustus, A. M., (<i>Univ. of Kansas</i>), 1898,	Lawrence, Kans.
Johnson, Ellen Marie,	Chicago.
Norris, Allen Anson, A. B., (<i>Univ. of Indiana</i>), 1902,	Chicago.
Thomas, Lena,	Monmouth.
Van de Sand, William B.,	Friend, Neb.
Von Colditz, Thomsen S., L. L. B., (<i>Northwestern Univ.</i>), 1903,	Chicago.
Warren, William Franklin, M. D., (<i>Meharry Medical Coll.</i>), 1891,	Tyler, Tex.
Wells, Mary J., M. D., (<i>Hahneman Medical Coll.</i>) 1899,	Princeton, Wis.

SCHOOL OF DENTISTRY

SENIORS

Alsip, Herbert Swiger,	Ogden.
Ament, George Dunn,	Yorkville.
Autenreith, Bernard B.,	Chicago.
Bailey, Earl Root,	River Forest.
Baker, Grace,	Chicago.
Berry, Walter Howard,	Rochelle.
Bott, Harry Seacord,	Chicago.
Campbell, James Alfred,	Bangor, Mich.
Carey, Mae,	Chicago.
Clancey, Leon William,	Plainwell, Mich.
Clary, John Robert,	Decatur.
Comer, Charles Edgar,	Vermont.
Crandall, William Horace,	Kempton.
Darmer, John Elbert,	Champaign.
Eiser, Lee Earl,	Rochelle.
Flanigan, John Joseph,	Temple Hill, Ia.
Frey, Joseph Clark,	Chicago.
Funston, George Edward,	Cherokee, Ia.
Gordon, Stephen Francis,	Manistee, Mich.
Grissom, Milton Absalom, D. D. S., (<i>Univ-</i>	
<i>Dental Coll. of St Louis</i>), 1897,	Cape Girardeau, Mo.
Gunn, Robert John,	McCook, Neb.
Houston, Kenneth Ward,	Beloit, Wis.
Houston, George Russell,	Grand Rapids, Wis.
Houston, Robert E.,	Peoria.
Ivey, Francis Hodge,	Chicago.
Kelly, Frank Hetherington,	Chicago.
Kerr, Norman Le Roy,	Chicago.
Kimmel, Nathan,	Chicago.
Krebs, William Aloysius,	Chicago.
Krog, Robert William,	Chicago.
La Due, John Byron,	Allegan, Mich.
Lancaster, Harvey Middleton,	Chicago.
Lewin, Edwin,	Chicago.
Logan, Thomas Henry,	South Wayne, Wis.
Lyle, Arthur Garfield,	Decatur, Mich.
McCall, William George,	Boles.
McDonald, John,	Salem, Wis.

McDowell, Charles,	<i>Faulton, S. Dak.</i>
McDowell, Elmer Newton,	<i>Woodstock.</i>
McKahan, James Edward,	<i>River Falls, Wis.</i>
McSwiggin, Jeremiah Frank,	<i>Wilton Junction, La.</i>
Marshall, Jay Phillips,	<i>Des Moines, Ia.</i>
Mecham, Norton Ray,	<i>Oakley, Idaho.</i>
Mindlin, Albert,	<i>Chicago.</i>
Moore, Vernon Alvin,	<i>Mt. Carroll.</i>
Nauman, Arthur Gottlieb,	<i>Chicago.</i>
Nordgren, Robert Godfrey,	<i>Galva.</i>
Nugent, Clarence Conner,	<i>Chicago.</i>
Peterson, David Albert,	<i>Muskegon, Mich.</i>
Pogue, James Chester,	<i>Maroa.</i>
Porterfield, William Roy,	<i>Traer, Ia.</i>
Quinlin, Michael James,	<i>Marysville, Mo.</i>
Rains, Roland Roderick,	<i>Sault Ste. Marie, Mich.</i>
Ramsey, Stonewall Jackson,	<i>Cottonwood, Tex.</i>
Rotzall, Paul August,	<i>Chicago.</i>
Schroeder, Theodore,	<i>Chicago.</i>
Sepple, Charles Vicent,	<i>Chicago.</i>
Shaw, Harry Valentine,	<i>Morrison.</i>
Sherrill, Charles McCurdy,	<i>Browning.</i>
Smith, Edward William,	<i>Timpson, Tex.</i>
Smith, Frank Hayworth,	<i>Dickenson, N. Dak.</i>
Smith, Irving Leland,	<i>Hospital.</i>
Spare, Maurice Harry,	<i>Chicago.</i>
Stephenson, George Hume,	<i>Apple River.</i>
Stevens, Arthur Jackson,	<i>Stevens Point, Wis.</i>
Stone, William Ferdinand,	<i>Chicago.</i>
Strain, Homer Birdell,	<i>Darlington, Ind.</i>
Thomas, James M.,	<i>Apple River.</i>
Waterworth, Tom,	<i>Napier, New Zealand.</i>
Weisz, David,	<i>Chicago.</i>
Wood, Arthur La Monte,	<i>Wyocena, Wis.</i>
Wybramic, Peter,	<i>Chicago.</i>
Young, Arthur John Hellmuth,	<i>Chicago.</i>

JUNIORS

Brady, Elizabeth Neil, M. D., (<i>North-western Univ.</i>), 1900,	<i>Chicago.</i>
Clinite, Floyd Ellis,	<i>Rochelle.</i>

Coleman, Guy Thomas,
 Cree, Charles Garfield,
 Desser, Louis,
 Dyblie, John Helmer,
 Ertel, Herman Henry,
 Fuqua, Victor,
 Gill, W. Walter,
 Helmick, Otto W.,
 Holden, Walter Horace,
 Jents, James Abram,
 Krone, Otto August,
 Landon, Orrin Frederic,
 Marquis, Robert Lyle,
 Mason, Clarence Joseph,
 Mauerman, Hugo Charles,
 Miller, Louis,
 Mortenson, John Ole,
 Nelson, Theodore Martin,
 Prenske, Alvin,
 Prohaske, Otto L.,
 Rockfellow, John Albert,
 Stocker, Carl George,
 Taylor, Elmer Eugene,
 Thompson, William,
 Tym, William Bradford,
 Vita, Valerian Julian,
 Walker, Thomas Raymond,
 Waterman, Glen,
 Wimmer, Wallace Alexander,
 Worthington, Chester Allen,
 Worthington, Samuel Lester,
 Wright, James Alexander,

Chicago.
Flora, Ind.
Chicago.
Joliet.
Chicago.
Chicago.
Corning, Ia.
Bellflower.
Chicago.
Hospital.
Northfield, Minn.
Remington, Ind.
Chicago.
Newell, Ia.
Chicago.
Chicago.
Burbank, Cal.
Oak Park.
Chicago.
Chicago.
Seattle, Wash.
Newell, Ia.
Chicago.
Chicago.
Todd Point.
Faribault, Minn.
Anniston, Ala.
Newell, Ia.
Chicago.
Indianola.
Indianola.
Chicago.

FRESHMEN

Becker, Walter Edward,
 Bedford, W. Erle,
 Challenger, Elmer Edgar,
 Clark, Ezra T.,
 Cleveland, Carleton,
 Colstrom, Carl A.,

Sandwich.
Sunfield, Mich.
Chicago.
Fannington, Utah.
Chicago.
Chicago.

Cronk, Benjamin Bicknell,	<i>Belvidere.</i>
Czarra, Dorothy H.,	<i>Chicago.</i>
Daye, Chester Walter,	<i>Chicago.</i>
De May, Rollo O.,	<i>Danbury, Neb.</i>
Dierks, William John,	<i>Toledo.</i>
Diller, Peter Burt,	<i>Bluffton, Ohio.</i>
Driver, Ralph Burt,	<i>Minneapolis, Minn.</i>
Dunn, Joseph Atwood,	<i>Piper City.</i>
Fels, Leo Jacob,	<i>Chicago.</i>
Foley, Clarence L.,	<i>Rockford.</i>
Frankel, David Abraham,	<i>Chicago.</i>
Frey, Henry,	<i>Chicago.</i>
Friduss, Joseph Zola,	<i>Chicago.</i>
Goglinski, Walter Zola,	<i>Chicago.</i>
Halperin, Abraham N.,	<i>Chicago.</i>
Hoover, Thomas E.,	<i>Tolono.</i>
Jackson, Charles W.,	<i>Chicago.</i>
Jacobs, Joseph Elmer,	<i>Burlington, Wis.</i>
Kubitz, Harvey Hugo,	<i>Oak Park.</i>
Lasker, Maurice,	<i>Chicago.</i>
Lescher, John Jay,	<i>Mt. Carmel.</i>
Levin, Samuel A.,	<i>Chicago.</i>
Lockwood, Bradley Franklin,	<i>Gannvalley, S. D.</i>
Lyons, Ernest,	<i>Corning, Ia.</i>
Marquis, Maynard Maine,	<i>Aledo.</i>
McCarthy, Thomas J.,	<i>Chicago.</i>
McCreight, James Steele,	<i>Aledo.</i>
Murphy, Lawrence Bernard,	<i>Bear Lake, Mich.</i>
Nowacki, Walerjan Wacław,	<i>Chicago.</i>
Shere, Alex A.,	<i>Chicago.</i>
Silverberg, Maurice,	<i>Chicago.</i>
Singer, Samuel J.,	<i>Chicago.</i>
Smith, Elijah,	<i>Chicago.</i>
Spangler, Harry Thomas,	<i>Plainfield.</i>
Thiel, Louis A.,	<i>Portage, Wis.</i>
Thomson, Johanne C.,	<i>Genoa, Neb.</i>
Urbanek, Joseph,	<i>Chicago.</i>
Voight, William A.,	<i>Toledo.</i>
Vorwerk, Frederick William,	<i>Chicago.</i>
Wheeler, George William,	<i>Bellflower.</i>
Zimonth, Anthony J.,	<i>Chicago.</i>

SCHOOL OF PHARMACY

SENIORS

Aaseth, Carl Martin,	<i>Gayville, S. Dak.</i>
Abrams, Benjamin Robert,	<i>Butler, Ind.</i>
Anderson, Carl Godfrey,	<i>Chicago.</i>
Berthlein, Fred,	<i>Chicago.</i>
Boyce, Charles William,	<i>Chicago.</i>
Brown, James Francis,	<i>Chicago.</i>
Curtis, Arthur E.,	<i>Rock Falls.</i>
Detrick, Leo George,	<i>Chicago.</i>
Dickhut, Lawrence August,	<i>Quincy.</i>
Dillow, Guy Garland,	<i>Dongola.</i>
Dufner, William Vincent,	<i>Peoria.</i>
Fallis, Perry Leroy,	<i>Chicago.</i>
Gerhardt, August Edward,	<i>Springfield.</i>
Guerten, George Jacob Joseph,	<i>Madison, Wis.</i>
Hall, John Ross,	<i>Bloomington.</i>
Hawk, William Milton Eugene,	<i>Kittanning, Pa.</i>
Honsik, James Michael,	<i>Chicago.</i>
Indovina, Michael,	<i>Chicago.</i>
Jacob, Herman Ferdinand,	<i>Oak Park.</i>
Johnson, Milton,	<i>Chicago.</i>
Johnson, Thure William,	<i>Chicago.</i>
Koch, Oswin Fred William,	<i>Chicago.</i>
Laatz, John Ernest,	<i>Chicago.</i>
Larson, Thomas Lewis,	<i>Kasson, Minn.</i>
Lee, John Victor,	<i>Evanston.</i>
Lens, Charles Frederick,	<i>Marietta, O.</i>
Levin, Justin Aaron,	<i>Chicago.</i>
Longshore, William Henry,	<i>Grand Junction, Colo.</i>
Lukasek, Edward Albert,	<i>Chicago.</i>
McGinley, Ebner,	<i>Moweaqua.</i>
Mayfield, Frank,	<i>Mt. Vernon.</i>
Mick, John George,	<i>Millsville, Wis.</i>
Moreland, Walter Henry,	<i>Metropolis.</i>
O'Neill, Garrett James,	<i>Evanston, Wyo.</i>
Ostrowski, Leonard Joseph,	<i>Hammond, Ind.</i>
Parker, John Kumler,	<i>Griggsville.</i>
Patejal, James,	<i>Chicago.</i>
Plummer, Louis W.,	<i>Chicago.</i>

Powell, Charles Joseph,	<i>Kenton, Tenn.</i>
Scheips, Theodore Immanuel,	<i>Peru, Ind.</i>
Schultejann, Bernard,	<i>Chicago.</i>
Siebrandt, Martin John,	<i>Merrill, Wis.</i>
Slauson, Harry Eugene,	<i>Denver, Colo.</i>
Staack, Hugo Franz,	<i>Maquoketa, Ia.</i>
Wehrley, John Henry,	<i>Chicago.</i>
Wells, Frances Ellsworth,	<i>Peotone.</i>
Wile, Thomas Hudson,	<i>Texarkana, Tex.</i>
Wilson, Milton Grundy,	<i>Lostant.</i>
Wiltgen, John Peter,	<i>Chicago.</i>

JUNIORS

Abrams, James Garfield,	<i>Lawrence, Mich.</i>
Ackermann, Albert George Carl,	<i>Quincy.</i>
Alfaro, Emilio,	<i>Barros, P. R.</i>
Anderson, Walter Edward,	<i>Kasson, Minn.</i>
Andrews, Merrill Eugene,	<i>Nunda.</i>
Arentz, Sigmar Edward,	<i>Chicago.</i>
Arnold, Ethelyn Belle,	<i>Watseka.</i>
Beckett, Allen,	<i>Chicago.</i>
Behrensmeyer, Otto Ernst,	<i>Quincy.</i>
Bettine, Julius Alfred,	<i>Charles City, Ia.</i>
Blahnik, Lawrence Albert,	<i>Chicago.</i>
Borucki, Edward Anton,	<i>Chicago.</i>
Brooks, Jacob,	<i>Chicago.</i>
Bucklin, Frank Emery,	<i>Chicago.</i>
Burger, Russell,	<i>Beloit, Wis.</i>
Byers, Stacy Alexander,	<i>Albany.</i>
Carlson, Henry Godfrey,	<i>Moline.</i>
Cerney, Lawrence,	<i>Chicago.</i>
Cox, Bernard Francis,	<i>Chicago.</i>
Crawford, Frank Alexander,	<i>Herschler.</i>
Cropp, Daniel Tappington,	<i>Chicago.</i>
Dale, Gustav Garfield,	<i>Sullivan, Ind.</i>
Dick, Maurice Selig,	<i>Chicago.</i>
Dodge, Roy Eliphalet,	<i>Charleston, N. H.</i>
Dolejsi, James Edward,	<i>Chicago.</i>
Eberly, Ralph Milton,	<i>Aurora.</i>
Edwards, Marie Genevieve,	<i>Frankfort, S. Dak.</i>

Eisele, George,	<i>Quincy.</i>
Fry, Marcys George,	<i>Chicago.</i>
Gauther, Charles Desire,	<i>Green Bay, Wis.</i>
Grebel, Ernst Elmer,	<i>Beaver Dam, Wis.</i>
Grimes, Wilbur,	<i>Clinton.</i>
Haeseler, Loren Milton,	<i>Chicago.</i>
Haffner, George Fred,	<i>Farmer City.</i>
Hart, Henry Mathew,	<i>Chicago.</i>
Hisgen, Fred Joseph,	<i>Chicago.</i>
Hoffman, Carl Edward,	<i>Plymouth, Wis.</i>
Holland, David Lewis,	<i>Chicago.</i>
Hollnagel, Henry Arnold,	<i>Chicago.</i>
Hotlen, Adolph A.,	<i>McFarland, Wis.</i>
Hurwich, Louis Julius,	<i>Chicago.</i>
Joyce, Edward,	<i>Chicago.</i>
Kienzle, Francis Constantine,	<i>Brooklyn, N. Y.</i>
Knoblock, Delbert Gustav,	<i>South Bend, Ind.</i>
Kraemer, William,	<i>Chicago.</i>
Krueger, Frank Fred,	<i>Seymour, Ind.</i>
Krueger, Henry John,	<i>Chicago.</i>
Kujawski, Bruno Stanley,	<i>Chicago.</i>
Laack, Julius Augustus,	<i>Sheboygan, Wis.</i>
Lester, John Patrick,	<i>Amboy.</i>
Linowiecki, Walter Frank,	<i>Chicago.</i>
Luken, Edward Emil,	<i>Chicago.</i>
McCaslin, Hugh,	<i>Nokomis.</i>
McGuire, Bernard Edward,	<i>Chicago.</i>
McRory, William Aluii,	<i>Bardwell, Ky.</i>
Mackenheimer, Don Grover,	<i>Carmi.</i>
Markowski, Michael J.,	<i>Chicago.</i>
Martin, Frank Eugene,	<i>Chicago.</i>
Mayhew, Walter Simonds,	<i>Kasson, Minn.</i>
Meixner, Fred Morris Frankfort,	<i>Chillicothe.</i>
Meyerovitz, Abe,	<i>Chicago.</i>
Mori, Kinro,	<i>Nagoya, Japan.</i>
Mrazek, Rudolph George,	<i>Chicago.</i>
Murray, Walter Allen,	<i>Traverse City, Mich.</i>
Nekola, Joseph Julius,	<i>Chicago.</i>
Nelson, Frank Willis,	<i>Lake Villa.</i>
O'Connor, James Thomas.	<i>De Kalb.</i>

Palmer, George Dwight,	<i>Joliet.</i>
Pannenberg, Jesse Arnold,	<i>Hammond, Ind.</i>
Peters, Thomas John,	<i>Leadville, Colo.</i>
Pitney, Fred William,	<i>Augusta.</i>
Pomeroy, Howard,	<i>Auburn, Ind.</i>
Ragor, Joseph Andrew,	<i>Chicago.</i>
Reite, Rolf,	<i>Cooperstown, N. Dak.</i>
Robinson, John William,	<i>Peru.</i>
Roesing, John George,	<i>Chicago.</i>
Ross, Joe Benjamin,	<i>Canton</i>
Ruben, Charles,	<i>Chicago.</i>
Rund, Bohumil,	<i>Chicago.</i>
Schultz, Caesar Edward,	<i>Joliet.</i>
Seyfert, Paul,	<i>Thiensville, Wis.</i>
Shatzkis, Otto,	<i>Chicago.</i>
Sheckler, Roy Benjamin,	<i>Stockton.</i>
Skourup, Waldemar Nelson,	<i>Chicago.</i>
Stahlfeld, Matthew Gustav,	<i>Chicago.</i>
Staman, William J.,	<i>St. Joe, Ind.</i>
De Stefano, Edward,	<i>Chicago</i>
Stromer, Frank Bengal,	<i>Chicago.</i>
Taylor, Luther Lee,	<i>Havana.</i>
Thorpe, Ralph Wayne,	<i>Wapella.</i>
Tilton, Claude Enoch,	<i>Fairmount.</i>
Tracy, Bert Ross,	<i>Elgin.</i>
Turner, Alexander Leonidas,	<i>Natchez, Miss.</i>
Tyson, Floyd,	<i>Athens.</i>
Watwood, Henry, Jr.,	<i>Wickliffe, Ky.</i>
Weis, Louis Harry,	<i>Hammond, Ind.</i>
Whittaker, Willie Sidney,	<i>Deadwood, S. Dak.</i>
Yochem, John Peter,	<i>Fountain City, Wis.</i>
Zukowski, John Leon,	<i>Chicago.</i>

SPECIALS

Venn, Charles,	<i>Chicago.</i>
Weinschenk, Harvey,	<i>Chicago.</i>

ACADEMY

Ahern, Mary Agnes,
Akers, Nellie,
Ball, Jay Hamilton,
Barker, Lawrence Byron,
Barr, Clyde Munhall,
Bashen, George Bergen,
Baum, Mark Winchester,
Bell, Rodney Linton,
Bennett, Earl Leslie
Benson, Glenn Robert,
Bradley, William Horace,
Braner, Lydia Marie,
Breedlove, James Ellison,
Brinkman, Carl Edward,
Brown, John Quincy,
Brownfield, Nora Isabella,
Buck, Turney English,
Burrill, Irene Elsa,
Cain, Patrick Clement,
Campbell, Allan Berry,
Carper, John Fisher,
Carr, John Robison,
Cary, Clifton Guy,
Clarke, Eldon Benson,
Clinite, Raymond Grover,
Coen, James Thomas,
Coffman, Daniel,
Cohen, Julius Bernstein,
Correll, Grover Thomas,
Corwin, Ellera James,
Craigmile, Eunice,
Crain, Chester McElfresh,
Cristy, Harold E,
Dailey, Earl,
Day, Clarence Harvey,
Deaner, Otto Percival,
Depke, Edward Charles,
Doherty Robert Ernest,
Donahue, William Joseph,

Champaign.
Urbana.
Toluca.
Batavia.
Braidwood.
Bowen.
Champaign.
West York.
Hanover.
La Moille.
White Heath.
San Jose.
Arcola.
Warsaw.
Van Orin.
Urbana.
Springfield.
Urbana.
Wyoming.
La Harpe.
Buda.
Bowling Green, Mo.
Elburn.
Libertyville.
Cherry Valley.
Olney.
Sidell.
Urbana.
Dawson.
Annawan.
Gifford.
Urbana.
McHenry.
Olney.
Easton.
Sheldon.
Danville.
Clay City.
Cullom.

Dowden, William Pugh,
 Dunn, William Lawrence,
 Dyniewicz, Mathew January,
 Earley, Joseph Eunice,
 Eastmann, Marshall David,
 Eggleston, Richard Stoughton,
 Eide, Ranolph,
 Ercanbrack, Hal Edmund,
 Esselborn, William,
 Evans, Homer Whitmore,
 Fackler, Alec Salvinus,
 Firebaugh, Clarence,
 Fish, Clifford Julius,
 Foltz, Leroy Stewart,
 Foran, Patrick,
 Forman, Hamilton McClure,
 Freeman, Edward Edgar,
 Fuller, Leon Elmer,
 Garnett, Robert Edward,
 Gloyd, Galen Van Rensselaer,
 Glynn, Arthur,
 Godfrey, Wall,
 Goll, George Gerald,
 Gourley, Mary Jane,
 Gourley, Margaret Trevif,
 Graham, Albert Edgar,
 Gray, Charles Walter,
 Green, Bruce Clifton,
 Gregory, Alta Beatrice,
 Grimes, Roy L,
 Groom, Etta Frances,
 Grosh, Anna,
 Grove, Sanford Lackey,
 Gundersen, Gudrun Cornelia,
 Gwinn, Avis,
 Hall, Charles Walter,
 Hanker, Walter Herman,
 Harbison, Charles Harold,
 Harkness, Columbus Loren,
 Harrell, Maxwell,

Oklahoma City, Okla.
Peoria.
Chicago.
Butte, Mont.
Hanover.
Urbana.
Lee.
Elburn.
Pearl City.
Plainfield.
Urbana.
Chicago.
Clinton.
Fowler.
Toluca.
East St. Louis.
Ogden.
Elgin.
St. Mary's.
Macomb.
Rochester, Ind.
Staunton.
Chicago.
Paxton.
Paxton.
Monmouth.
Cuba.
Sidell.
Moweaqua.
Urbana.
Urbana.
Mendon.
Cerro Gordo.
Chicago.
Urbana.
East Lynn.
Toledo.
St. Louis, Mo.
Adams.
Watseka.

Harris, Alfred Wilson,
Harris, Ralph Maurell,
Hasket, Paul Edmund,
Heinrich, George Andrew,
Hemenway, Pliny Fred,
Hilbert, Lewis Albert,
Hill, Jesse Leven,
Hill, Lucy Bell,
Hirsch, Stanton Pike,
Holmes, Harry Christian,
Holton, Charles Roy,
Hovda, Alvin Eugene,
Howes, Robert,
Howser, Herman Blaine,
Hubbard, Clayton Claude,
Hughes, Alexander Gibon,
Hunter, Alfred Hughllyn,
Hussey, Alfred Thompson,
Hyde, Wilbur Gilpin,
James, Charles Austin,
Johanning, Paul Martin,
Johnson, William Arthur,
Jones, John Lloyd,
Jordan, Myron Kerdal,
Judd, Orrel Perry,
Kacin, Anton Charles,
Kaeser, Emil Fred,
Kaeser, Oscar Charles,
Kartowicz, Frank George,
Kellogg, Howard Campbell,
Kellum, Charles Samuel,
Kern, Etta Lavern,
King, Emma Lucy,
Kingsolver, Frank Leroy,
Kreiling, Chris Hermann,
Lambert, Karl Edward,
Latta, Smith Harrison,
Lautz, Benjamin Harrison,
Layden, John Emmett,
Lee, Edward,

Tremont.
Champaign.
Baxter Springs, Kas.
Belleville.
Moline.
Urbana.
Oakwood.
Urbana.
St Louis, Mo.
Macomb.
Colchester.
Leland.
Bloomington.
Urbana.
Red Cedar, Wis.
Antioch.
Mendon.
Williamsville.
Rising.
Chester.
Champaign.
Chicago.
Bradford.
Savoy.
Urbana.
Chicago.
Highland.
Libertyville.
Chicago.
Tiskilwa.
Sycamore.
Ridge Farm.
Fairborough.
Mattoon.
Forest City.
Rushville.
Oak Park.
Normal.
Cheneyville.
Aledo.

Lehman, Douglas Archer,
Lehmann, Gertrude Marie,
Le Sure Charles Samuel,
Lockhart, Horace Claude,
Long, Earl Valney,
Lucas, Leonora,
McAllester, William Knowlton,
McCandless, Frank James,
McCollum, Cecelia,
McComb, John Bamont,
McCormick, James,
McCormick, William,
McDonough, John,
McEvoy, Harry Herbert,
McKee, Dewitt Talmage,
McKenna, John Edward,
McKinney, Clarence David,
McKinney, Lila,
McKinney, Roland Boyd,
McKinney, Roy Harrison,
McLennan, Arthur,
McNicol, Elmo Percival,
Maffioli, Frank,
Marsh, Daniel,
Marshall, Howard George,
Mathewson, John Warne,
Mathis, Frances Willard,
Mathis, Victor Alvin,
Matthews, Leo,
Michener Elmo Eggleston,
Mickle, George Earle,
Miller, Bert Andrew,
Miller, Levi Wesley,
Miller, Samuel Leslie,
Morrell, Thomas Foster,
Morrison, John Leland,
Morton, Levi Parson,
Morton, Venia,
Murfin, Arthur Lee,
Murfin, Walter Dean,

Carmi.
Elgin.
Olney.
Greenview.
Decatur.
Urbana
Winona.
Allerton, Iowa.
Crystal Lake.
Chicago.
Perry, Iowa.
Garver Station
Urbana.
Ottawa.
Arlington.
Chicago.
Gifford.
Gifford.
Urbana.
Gifford.
Urbana.
Urbana.
Rockford.
Weldon.
Atwood.
Elburn.
Seymour.
Seymour.
Champaign.
Urbana.
Red Oak.
Forrest.
Urbana.
Timewell.
Ottumwa, Ia.
Waterman.
Urbana.
Urbana.
Vernon.
Patoka.

Murray, Everett Bodman,
Naught, Adaline Elizabeth,
Nourse, Fred Melvin,
Oldham, Clyde Carbeton,
Parr, Elisabeth,
Payton, Frank Neely,
Perce, Earle Houts,
Phelps, Orange,
Phillippe, Jay Simpson,
Pierce, Laura Estelle,
Poole, Lawrence Clifford,
Poorman, Amy,
Poorman, Paul Wamsley,
Post, George Earle,
Price, Fred H,
Prichard, Arthur David,
Putnam, Walter Edward,
Reasoner, Richard Barkley,
Rebman, Bessie Gladys,
Redfield, William Roy,
Reeves, Harry Payne,
Rice, Emigh,
Richardson, Alonzo Benjamin,
Rives, Kent King,
Robbins, Philo Thompson,
Rodgers, Robert Beam,
Rodriguez, Joseph,
Schlonitzky, Isadore,
Scofield, Harry Lott,
Seeley, Marena,
Settlemire, Wilbur Lynn,
Seymour, Robert Ross,
Seymour, Walter Alfred,
Shepherd, Sarah Bernice,
Shipton, Charles Custer,
Shrader, Frank Kay,
Skeffington, James Ambrose,
Smith, Alfred Hazel,
Smith, Edward Randolph,
Smith, Irwin Webster,

Chicago.
Layton.
Chicago.
Urbana.
Urbana.
Danville.
Williamsville
San Francisco, Calif.
Champaign.
Gifford.
Moline.
Altamont.
Humboldt.
Fithian.
Lena.
Ottawa.
Pana.
Colorado Springs, Colo.
Forreston.
Toulon.
Carmi.
Aurora.
Amboy.
Palmyra.
Payson.
Riverton.
Saltillo, Coahuila, Mex.
Urbana.
Wellington.
St. Joseph, Mo.
Litchfield.
Henning.
Henning.
Urbana.
Hanover.
Knoxville.
Lamoille.
Keithsburg.
Urbana.
Urbana.

Smith, Rossie Franklin,	<i>Urbana.</i>
Snow, Elbert Summers,	<i>Cody, N. C.</i>
Squires, Harry,	<i>Alexis.</i>
Steele, Eugene Martin,	<i>Urbana.</i>
Stehman, John Miller,	<i>Pasadena, Calif</i>
Stevenson, Milton Leonard,	<i>Mason City.</i>
Stolle, Ida Josephine,	<i>Urbana.</i>
Stowell, Charles Edward,	<i>Tampa, Florida.</i>
Strubinger, Ellis,	<i>Pittsfield.</i>
Swartz, Jesse Wilmot,	<i>Galesville.</i>
Swett, William Claude,	<i>Elgin.</i>
Swisher, Charles Lee,	<i>Wellington.</i>
Thal, Hugo John,	<i>Urbana.</i>
Thissel, George,	<i>Urbana.</i>
Thomasson, Conrad Walter,	<i>Quincy.</i>
Thompson, William Asbury,	<i>Payson.</i>
Voedisch, Henry Arthur,	<i>Chicago.</i>
Wacaser, Franklin Edgar,	<i>Hammond.</i>
Wackerle, Lewis Edward,	<i>Jacksonville.</i>
Wahl, Louie August, Jr.,	<i>Urbana.</i>
Walker, Edward Isaac,	<i>Peoria.</i>
Warke, Joseph Alexander,	<i>Champaign.</i>
Warne, Glenn Clayton,	<i>Elburn.</i>
Weldon, James Michael,	<i>Normal.</i>
Wheeler, Arthur Wayne,	<i>Bellflower.</i>
White, Earl,	<i>Morrisonville.</i>
White, Earl Archibald,	<i>Loonlake.</i>
White, Madge,	<i>Champaign.</i>
White, Tessie Olive,	<i>Champaign.</i>
Woolman, Collett Everman,	<i>Urbana.</i>
Yott, Frank Danneil,	<i>Chicago.</i>
Yowell, John Bennett,	<i>Dudley.</i>
Zeller, John George,	<i>Spring Bay.</i>

SPECIALS IN MUSIC

Braman, Olive Ruth,	<i>Urbana.</i>
Brown, Ollie May,	<i>Urbana.</i>
Buchanan, Loretta May,	<i>Urbana.</i>
Butler, Anna Rebecca,	<i>Homer.</i>
Coar, Marjorie Belle,	<i>Urbana.</i>

Craig, Hazel Ione,
 Durfey, Franc Aletha,
 Esslinger, Vera Sophia,
 Eyestone, Bertha Josephine,
 Gallion, Grace Margaret,
 Harris, Agnes Ziza,
 Hohm, Mae Louise,
 Howard, Cecil Lorraine,
 Howe, Amy,
 Jacobs, Alta Geneva,
 James, Helen Dickson,
 Kern, Emma Ruth,
 Littell, Huldah Maude,
 Lytle, Olive Clara,
 Manford, Ruth H,
 Martin, Emmett Blaine,
 Matthews, Bessie Glenn,
 Matthews, Bessie Glenn,
 Moran, Bessie,
 Robinson, Florence Elinor,
 Rowand, Minnie Jane,
 Saffell, Gladys De Forrest,
 Shaw, Lottie J,
 Stevenson, Bessie Katherine,
 Stevenson, Chester Edwin,
 Storer, Martha Grace,
 Stover, Nelly Edith,
 Swan, Grace Vernelle,
 Swigart, Alta Caroline,
 Switzer, Myrtle Aurella,
 Turell, Inez,
 Vanneman, Grace Sadonia,
 Wade, Luther Clinton,
 Weiros, Gertrude Elizabeth,
 White, Alta Ida,

Champaign.
Tolono.
Danville.
Champaign.
St. Joseph.
Urbana.
Sycamore.
Urbana.
Urbana
Moweaqua.
Urbana.
Ridge Farm.
Fithian.
Urbana.
Champaign.
Urbana.
Burlington, Ia.
Champaign.
Effingham.
Urbana
Sidell.
Urbana.
Champaign.
Urbana.
Urbana.
Champaign.
Mahomet.
Waynesville.
Champaign.
Farina.
Champaign.
Urbana.
Fisher.
Kempton.
Champaign.

SUMMARY OF STUDENTS—1904-1905.

	<i>Men.</i>	<i>Women.</i>	<i>Total.</i>
GRADUATE SCHOOL.....	103	23	126
UNDERGRADUATE COLLEGES—			
Seniors	177	85	262
Juniors.....	253	64	317
Sophomores.....	355	97	452
Freshmen.....	459	158	617
Specials.....	337	131	468
	1581	535	2116
SUMMER SESSION	145	93	238
Remained, counted above.....	63	43	106
	82	50	132
COLLEGE OF LAW—			
Third year.....	22		22
Second year.....	31		31
First year.....	42		42
Specials.....	34		34
	129		129
COLLEGE OF MEDICINE—			
Seniors	223	12	235
Juniors	176	14	190
Sophomores	98	5	103
Freshmen	98	5	103
Unclassified	18	4	22
	613	40	653
SCHOOL OF DENTISTRY—			
Seniors.....	71	2	73
Juniors	33	1	34
Freshmen	46	1	47
	150	4	154
SCHOOL OF PHARMACY—			
Seniors.....	48	1	49
Juniors	97	2	99
Unclassified.....	2		2
	147	3	150
	2805	655	3460
Deduct counted twice.....	2		2
	2803	655	3458
ACADEMY.....	203	68	271
Total in University.....	3006	723	3729

DEGREES

Commencement Day, June 8, 1904, degrees were conferred as follows:

A.B.

Blanche Aldrich.	Alice Greenwood Derby, Ph. B., (<i>Ohio State Univ.</i>) 1901.
John Edward Anderson.	Mertie May Dillon.
Carl Elmer Armeling.	Frederic Hugo Doeden.
William Salisbury Ballard.	Archie Bland Dorman.
Perry Barker.	Earl Leroy Duell.
Ralph Stanley Bauer.	Charles Edwards.
James Russell Benson.	Lloyd Edwin Engel.
Mary Matilda Bevans.	Kenneth Neill Evans.
John Douglas Blocher.	Clarence Earl Fleming.
Frank Smith Bogardus.	Elmer Logan Garnett.
Bertha Julia Bond.	Lillian Mabelle George.
Helen Ethel Booker.	Charlotte Mitchell Gibbs.
Alda Holderman Born.	Louella Ida Gillespie.
Walter Charles Emil Braun.	Josiah Gorham.
Olin Lorraine Browder.	Cella Genevieve Green.
Camilla Margaret Brunner.	Elizabeth Grosvenor Greene.
Cary Clive Burford.	Mabel Greene, Pd. M., (<i>Coll. City of N. Y.</i>) 1892.
Elizabeth Eleanor Caldwell.	Ira Chase Harman.
Muriel Florence Campbell.	Altha Haviland.
Wilhelmina Ellen Carothers.	Elizabeth Lena Hawthorne.
Lucy Chapin.	Roy Wilson Hilts.
Angie Ray Clark.	Fred Leidy Holch.
Emo Lizzie Cole.	Timothy Osmond Holcomb, Jr.
Edward Chapman Converse.	Clarissa Louise Howell.
Fred Cresap.	Mabel Dorothy Hunt.
Trella Jane Cresap.	Lucile Jones.
Frederick Cuttle, M. D., 1904.	
Laura Dayton.	

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| Noah Knapp. | Karl Bird Seibel. |
| Martha Caroline Koehn. | Roy Vincent Seymour. |
| Leila Sara Love. | Carlyle Nance Shilton. |
| Elizabeth Delilah McClure. | Theodora Shoemaker. |
| Mary Elizabeth McIlhenny. | Aimee May Sides. |
| Maud Mangas. | Mary Jane Slocum. |
| Pearle Manspeaker. | Esther Anna Smith, A. B., |
| Elvira Ellen Mark. | (<i>Univ of Michigan</i>), 1903. |
| Myra Abbie Mather. | Florence Sebring Smith, A. M., |
| George John Mautz. | (<i>Univ. of Nebraska</i>), 1898. |
| Iva Esther Mercer. | Henry William Smith. |
| Martha Edith Moles. | Clara Louise Sommer. |
| Nelson Case Morrow. | Mildred Eliza Sonntag. |
| Helen Andromache Naylor. | Annie Elnora Sparks. |
| Cyrus Forsyth Newcomb, M. D., | Isabel Staley. |
| | 1904. Helen Florence Stookey. |
| Frederick David Niedermeyer. | Grace Ellen Switzer, Ph. B., |
| Tokujo Ogihara. | (<i>Univ. of Iowa</i>), 1902. |
| Mary Anderson Osgood. | Elsie Mae Taylor. |
| Fred Myrine Outhouse. | George Graham Taylor. |
| Maud May Patterson. | Clara Eugenia Trimble. |
| Eugene Martin Phillips. | Lewis Butler Tuthill. |
| Anna Shaw Pinkum, B. L., | Mahlon Smith Vance. |
| (<i>Univ. of Wisconsin</i>), 1899. | Lorena Nell Webber. |
| Florence Elizabeth Pitts. | Nellie Wetzel. |
| John Luther Polk. | Caroline Louise White. |
| Lida Elizabeth Popejoy. | Burton B Wilcox, |
| Jesse Roy Powell. | Frank Rudolph Wiley. |
| Lee Willard Railsback. | Mary Edith Williams. |
| Clara Ann Ranson. | Charles Gorham Wilson. |
| Edward Alexander Renich. | John Guy Wilson. |
| Claud Winfred Rich. | Emma Marie Wittlinger. |
| Charles Scamon Rodman. | Edna McClusky Work. |
| Charles Crecy Royall. | Ella Eugenia Worthen. |
| Inez Rose Samson. | Earl Layton Yocum. |
| Rudolph Ernst Schreiber. | |
| | B.S. |
| Ralph Elliott Abell. | David Arthur Baer. |
| Arthur William Allen. | Walter Thomas Bailey. |
| Adolphus Edward Askins. | Ralph Adams Ballinger. |

Harold Hendryx Barter.	Ralph Barnard Howe.
Roy Jabez Blackburn.	Otto Janssen.
Seymour Dewey Brown.	Edwin Benjamin Karnopp.
John Lee Buchanan.	David Henry Kelly.
Fred Henry Burgess.	Harry Bertram Kircher.
Ralph Royal Burgess.	Frank Hamilton Kneeland.
John Herman Burkhardt.	Henry Kreisinger.
Fred Clifford Carriel.	Leonard John Lease.
Thomas Aquilla Clark.	Ernest Richard Leverton.
Henry Camille Dadant.	Albert Edwin Logeman.
Cleon Leslie Davis.	Frederick Edwin Loosley,
John Wolfersperger Davis.	John McCarty.
Fred John Deutschmann, Jr.	John Fred McCullough.
James Ansel Dewey, M.S. 1898.	William Ashway McCully.
Edward August Dieterle,	William Asbury McKnight.
Arthur Garfield Diefenbach.	Neil McMillan, Jr.
Henry Bernhard Dirks.	Charles Judson Mann.
Frank Leon Drew.	George Requa Marsh.
Clyde Earl Durland.	Thomas Alfred Marsh.
Edward Gollert Eidam. .	Clarence Eugene Mead.
Torris Eide.	Fred Charles Miller.
Roy Victor Engstrom.	Floyd Earl Mills.
Lambert Theodore Ericson.	Aaron W Miner.
William Alonzo Etherton.	William Anderson Miskimen.
Samuel Barry Flagg.	Henry Childs Morse.
Carl Joshua Fletcher.	Jacob William Mueller.
Burton French.	Fred Lewis Muhl.
William Hiram Fursman.	Andrew Munsen.
Newton David Gaston.	Howard Bruce Murphy.
Philip Dakin Gillham.	Charles Albert Ocock.
Carl Louis Ginzel.	William Mansfield Park.
Paul Bond Glassco.	Ida May Pearson.
Ludwig Gutmann.	John Frederick Peterman.
Frank Stanley Hadfield.	Raebern Henry Post.
Charles Wesley Hawes, Jr.	Jerome Edward Readhimer.
Smith Tomkins Henry, Jr.	Augustus Joseph Reef.
Thomas Sloan Hewerdine. .	Llewellyn Sylvester Richards.
Frank Wyman Hilliard.	Ethel Ricker.
Clarence Eugene Holcomb.	Rollo Gaun Riddle.
Ray Leekley Horr.	Anna Riehl.

George Albert Riley.	Charles Philip Turner.
Robert Bennett Roulston.	George Garret Vanhorne.
Guy Henry Rump.	John Terrell Vawter, Jr
Arthur Platt Seymour.	Harry William Weeks, A.B.,
Charles Harper Sheldon.	(<i>Lombard Coll.</i>), 1900.
James Ricketts Shinn.	William Henry Wehmeier.
Carl William Simpson.	Carroll Carson Wiley.
Hugo Speidel.	Wallace Kenneth Wiley.
Lewis Alva Stephenson.	Le Roy C Wilson.
Robert Jaquess Stewart.	Lewis W Wise.
Charles Newhall Stone.	Norman Charles Woodin
Smith Leroy Stroud.	Joseph Garfield Worker.
John Orlo Taylor.	Joseph Carl Worrell.
Sherman Thompson.	Edmund Louis Worthen.
Peter Frederick William Timm.	Ward Ellis Wright.
Roy Elmer Travis.	

LL.B.

Charles Guy Briggles.,	Stewart William Kincaid, A.B.,
Raphael Parmer Bundy, A.B.	1902.
Ashton Ellsworth Campbell, A.B.	John Felix Kyte.
Charles Nicholas Casey.	Jae Ernest Leaverton.
Clinton Oliver Clark.	1901. Walter Charles Lindley, A.B.,
Lorin Clark.	1901.
Homer Clarence Coen, A.B., 1903.	Frank Merrill Lindsay.
Leonard Allen Colp.	George Harvey McKinley, Jr.
Manford E Cox.	William Anthony Medill.
John Lewis Dryer.	Charles Myers Morris.
Dean Franklin.	Calton William Parker.
Himan Richard Glick.	Lyle Donovan Perrigo.
Bartlett Stephen Gray.	Edwin Lindsay Poor, B.S. 1902.
George Warren Hunt.	Francis Marion Powers.
John William Jones.	William Shenck Prettyman.
William George Kaeser.	Henry Theodohr Shumacher.
Cloyd Elias Keith.	Harold Frank Tripp.
Le Roy Kershaw.	Lewis Butler Tuthill.
Daniel Clement Ketchum, A.B.,	Richard Percival Vickrage.
	Irving Mark Western, A.B. 1902.
	William Wilberforce Wright, Jr.
	1899.

B.L.S.

- | | |
|--------------------------------------|---------------------------------|
| Mary Matilda Bevans. | Charlotte May Jackson. |
| Mary Josephine Booth, A.B., | Leila Pauline King. |
| (<i>Beloit Coll.</i>), 1900. | Rena Avis Lucas. |
| Gertrude Amelia Buck. | John James McCarthy. |
| Mabel Etta Cafky. | Isabella Jane McCulloch, B. L., |
| Edna Clarkson. | (<i>Univ. of Wis.</i>), 1897. |
| Orrill Pauline Coolidge. | Erma Jane Moore. |
| Alice Bourland Coy. | Mabel Perry. |
| Mabel Katherine Davison. | Inez Charlotte Pierce. |
| Caroline Katharine Foster. | Bertha Ella Royce. |
| Pearle Frankenberg. | Ellen Mary Schaefer. |
| Margaret Amidon Gramesly. | Edna Weaver Sheldon. |
| Mrs. Gertrude Fox Hess. | Belle Sweet. |
| Nellie Goodwin Hewitt, A.B., | Anna David White. |
| (<i>Wells College</i>), 1898. | Alice Louise Wing. |
| Harriet Holderman. | Ida Faye Wright. |
| Edna Hopkins, A.B., | |
| (<i>Univ of Cincinnati</i>), 1902. | |

A.M.

- | | |
|-----------------------------------|--------------------------------------|
| Mary Anderson, A.B., 1903. | Ernest Barnes Lytle, B.S., 1901. |
| Oliver Morton Dickerson, A.B., | Martha Deette Rolfe, B. S., 1900. |
| | 1903. |
| Fred John Smith, A.B., | |
| Frances Emeline Gilkerson, A.B., | (<i>Ia. Wesleyan Univ.</i>), 1899. |
| | 1903. |
| Miriam Ursula Welles, A.B., 1903. | |
| Henry Allan Gleason, B. S., 1901. | Sadie Young, B.S., |
| Lawrence Fred Larson, A.B., | (<i>Univ. of Fla.</i>), 1902. |
| | 1903. |

M.S.

- | | |
|---------------------------------|---------|
| Edward Murray East, B.S., 1901. | |
| | M.Arch. |
| Joseph Wade Wilson, B.S., 1903. | |

M.E.

- | | |
|----------------------------|------------------------|
| George Lyman Grimes, B.S., | William Lamont Abbott. |
| | 1897. |

At the commencement of the College of Medicine May 24, 1904, degrees were conferred as follows:

M.D.

Wilson Ruffin Abbott, Ph.B.	Spencer Norman Chaffee, B.S.
Louis Ferdinand Alrutz.	Charles Albert Coffin.
George C. Amerson.	Travalo Chester Coggschall.
Orrin C. Amundson.	Samuel Nuel Colliver.
Charles Andrew Archer.	D. Edmund Cone, B.S., B.Pd.
Jay Latrell Armstrong.	Athol Llewellyn Cook.
Ray C. Ash.	George Frederick Cook.
Ross Harrison Axe.	Edward William Cooney.
Chester Arthur Ayers.	Thomas James Costello.
William Henry Bahl.	Arthur Murphy Crandall, M.D.
Otto Balenseifer, Ph.G.	Peter Hubert Cremer.
George Washington Bamberger.	Frank Richard Curney.
Howard Roswell Bankerd, A.B.	Guy Maynard Cushing, M.D.
Clarence Dryden Barker.	Frederick Cuttle.
Frederick August Baumgart.	John R. Dale.
James Robert Bean.	Karl August Danell, A.B.
Helen Pearl Beattie.	Frank Elmer David, D.D.S.
Judah Bezal Beck.	Francis Deacon.
George Beveridge, A.B.	Susie Marion De Cou.
May Biesenthal.	Otto John Dewitz, Ph. G.
Frank J Blackmer.	Samuel J. Dickey.
Loren G. Blackmer.	William Eugene Dickinson.
Robert Warren Blumenthal.	Franklin Commodore Dielman.
Davie Barnett Blumstein.	Bert John Dillon.
Olav Boehmer, B.A.	Albert Leroy Doe.
David Gladstone Borges.	John Philip Dougherty.
Frederick Alonzo Bordwell.	Frederick Murray Doyle, M.D.
Fred Brittin.	Royal James Dunn.
Richard Ames Burke.	William Henry Durkee.
Eugene George Campana.	Howard Demarest Eaton, A.B.
Henry Spencer Capps, B.S.	Jacob Leonard Eisendrath.
M.D.	Charles E. Ericson.
Albert Orton Carmack.	Robert Thornton Ewan.
William Henry Carr, B.S.	Louis Faulkner, M.D.
Schuyler W. Case.	Herbert Works Ferry.
John Algernon Cavanaugh.	J. Elliott Foltz.

William Watson Gailey, Jr.	James Burnett Hundley.
Francis Harvey Gambell, M.D.	Owen Ghormley Hutchison.
Irwin Adelbert Gardner.	George Meek Ingham.
Wilfred Henry Gardner, M.D.	Edward Taylor Jarvis.
Carl Albert Gesswein.	Charles Everett Jones, Ph. C.
Charles William Giesen.	George Timothy Joyce.
Esther Gimson.	Theodore Simon Kaemmerling.
I. L. Gotthelf.	Frank Miles Keefe.
Charles Mickel Gray, M.D.	Ellen Pauline Ketchum.
Edwin Wilson Gray.	James Bolton Knipe, Ph.G.
Joseph Ainsworth Greaves.	Susan Lillian Koons.
Helen Elvira Greggs.	George Joseph Kruk.
Harry Baldwin Gudgel.	Benjamin Gabriel Landau.
Cornelius Gunderson.	Gustave Adolph Landmann.
Emil Haberman.	Daniel Winfield Layman.
Stephen B. Haessly.	Arthur Leil Leeds, B.S., M.D.
Grace C. H. Frith Hagans.	Benjamin E. LeMaster.
Edward Leo Hallinan.	William Henry Lipman.
Henry Ludwig Halverson.	Martha L. Longstreet.
Seth A. Hammel.	Sherman L. Loupee.
Ira Chase Harman.	Harold Roy Lucas.
Arthur Lee Harnett.	Edward Luke.
William Emery Harrington.	Robert Edward McCracken, Ph.G.
Wayne Adelbert Harris.	Walter Allan McEachern.
Percy Parker Haslit.	Jos. Aloysius McGoey, Ph.G.,
Chalmer Nathan Hatfield.	M. D.
Hillis Hall Hattery.	Port McWhorter.
Andrew Peter Hawkins, Ph.G.	Manfred Robert Martin,
Edgar D. Heaton.	Luther Martin Marvel.
Miles Akin Heffelfinger.	Orson Eugene Matter, M.D.
Andrew John Helmark.	Charles Wesley Mattison, B.S.
Aloys Heinen.	Edward Anton Mayer, Ph.G.
Albert Francis Henning.	Nehemiah Paul Mead, Ph.G.
Alfred August Herrman.	Arthur Ellison Midgley, M.D.
Willis Townsend Hinman, Ph.G.	Anson Torence Miller.
Ralph Thompson Hinton.	Hanna Miller.
George Paul Hohly.	James John Monaghan.
LeRoy John Holmburg.	James Redman Montgomery, B.S.
Frank Marion Horstman, Ph.G.	Clara Moore.
William Frederick Houk.	Roy Robert Morden.

Robert Lyman Morris.	Carl Adam Starck.
John Wesley Morrison.	Robert E. Stevens.
David Holmes Morton.	Alfred Stocker, M.D.
Veda Chipfield Murphey.	Arthur John Stuenkel.
John Campbell Murphy.	Charles Casper Swab.
Henry Eugene Nelson.	Hartford Sweet, A.B.
John Percy Nelson.	Frederick James Swift.
Michael Nelson, M.D.	Flora Matina Tanquary.
Cyrus Forsyth Newcomb.	Frank Bashford Taylor.
William Lorenzo Nuckolls.	Margaret Teigen.
William Thomas Oaks, Ph.G.	Edna Margaret Thomas.
Robert Allan Oakes.	George Henry Thomas.
William Shelton Osborn.	John Norton Thorpe.
Don L. Parker.	David James Twohig.
Stephen Tyler Parsons.	Chester Deric Updegraff, M.D.
Charles Henry Pickett.	William John Vopata.
Edith Cory Pollock.	Clarence Heathcote Wall.
Albert Stirgus Price.	Frederick Jerome Walter, M.D.
Josef Francis Replogle.	William Frederick August Wer-
George Vincent Ridley.	gen.
Henry Richards.	Harry Oscar White, M.D.
John Wirt Ribinson.	Gratian Philip Whitwham.
Harry Francis Rubel.	Clauson Morrill Wilmot.
Samuel Joseph Russell, M.D.	Bryce Rex Winbigler.
Paul Otto Schallert.	Charles R. A. Windmueller.
Dirk J. Scholten, B.S.	Florence Anna Wing.
Oscar Paul Schnetzky, M.D.	Rosina Rehor Wistein.
Ernest de Lacey Seymour.	Frank Leighton Wood.
William Likely Simpson, B.D.	Orlando Garfield Wood.
Clyde Leroy Smith.	William Perry Woods, A.B.
James Lawrence Smith.	Charles Everett Yates.
John Snook, M.D.	William Hamilton Young, B.S.
Corydon Goodrich Snow.	AD EUNDEM DEGREE.
William Henry Spencer.	Charles Willard Geiger, M.D.

At the commencement of the School of Pharmacy April 28, 1904, degrees were conferred as follows:

Ph.G.

Guy Stanley Albright.	Harry Frederick Behrensmier.
Walter Albert Bade.	James Peter Bergstedt.

Charles Odus Bowman.	Carl Dilly McClenahan.
Frederick Andrew Brown.	William Lewis Mitchell.
Vincent W. J. Chvala.	John Nick Modaff.
Albert Henry Clark.	Louis James Nadherny.
Oliver Rop Colby.	Anton Joseph Oeth.
Ralph Morris Converse.	Philo Hoysradt Ozanne.
Delos Cozad.	George Melville Porter.
Joseph Michael Donahue.	Edwin John Sanders.
Robert W. Gelly.	Chester Aloyze Sankiewitz.
Elmer Walter Hadley.	Henry John Schmitt.
Arthur Leroy Hamley.	Louis R. A. Schwanke.
John Frederick Hartig.	Peter Xavier Sanger.
Henry Oliver Hartley.	James Shaynin.
Charles Louis Higgins.	Edward Stuchlik.
Alva Lane Hill.	Henry Stulik.
Richard Henry Juers.	John George Timmermier.
William Benardus Keusink.	Murble Booker Ulrich.
Eller George Knudson.	Richard Chauncey Webster .
Charles John Koller.	Charles John Welker.
Anton Emanuel Lindahl.	

At the commencement of the School of Dentistry, May 5, 1904, degrees were conferred as follows:

D.D.S.

Charles Eugene Abstein.	William Albert Gorney.
Elisha Melvin Arnold.	Frank Riley Granger.
Eric Berringer.	Woodie Clay Hobbs.
William Leslie Berryman.	John Holmes.
George C. Brady.	Lewis Warren Hopkins.
Lorace O. Catterson.	Herman Harry Hubbard.
Israel Cohn.	Thomas John Ireland.
Albert Edward Converse.	Charles Theodore Jacobs.
Vernon Pentfield Cooley.	George Arthur Jones.
Chester Coleman Dobbs.	Edward Kenney, Jr.
Herbert Allen Dickinson.	Henry Cooley Lee, Ph. G.,
Edmund Richard Fitzgerald.	(<i>Northwestern Univ.</i>) 1898.
Aaron C. Fogle.	Albert Bruno Lichtenberg.
Hedwig Freyer.	Charles M. Loescher.
Edward Morrow Glenn.	John Carlton Longwell.

George Reuben Loynd.	William Robert Rodenhauser,
George John Lyon.	Ph.G., 1900.
Ivon McCormick.	Elizabeth Louise Schulze.
John Charles Mackinson.	Charles Byron Sharp.
Oscar Fitzallen McMaster.	Oscar Emil Sommerfield.
William Henry McWilliams.	Louis Aurora Stout.
William Henry Mahoney.	Earl Olson Vahue.
Franklin Benjamin Moore.	Fred Wilson Van Voorhis.
Joseph Lawrence Murray.	Ernest Wycliffe Vercoe.
George Albert Ostermeier.	Richard Michael Walch.
Peter Christoffer Bronnum Peter-son.	John D. Welsh.
Elmer Hugh Ramsey.	Samuel Scott Wells.
Eva Ruth Richter.	Charles Fred Wertzler.
	Frederick Ambrose Whitbreck.
	George Henry Wilson.

SCHOLARSHIPS, HONORS, AND COMMISSIONS

HONORARY SCHOLARSHIPS

Christian,	Logan, Chester R.,	<i>Edinburg.</i>
Cook,	Abbott, Alice,	<i>Chicago.</i>
Cook,	Abbott, Sara,	<i>Chicago.</i>

STATE SCHOLARSHIPS

Adams,	Hewes, Floyd S.,	<i>Quincy.</i>
Adams,	Jacob, Ernest O.,	<i>Quincy.</i>
Alexander,	Warder, Walter B.,	<i>Carroll.</i>
Alexander,	Hildebrandt, Herman C. M.,	<i>La Salle.</i>
Alexander,	Hayes, Howard H.,	<i>Metropolis.</i>
Alexander,	Powers, Wilbur L.,	<i>Tiskilwa.</i>
Bond,	Morey, Henry H.,	<i>Greenville.</i>
Bond,	Stowe, Loyd R.,	<i>Bondville.</i>
Boone,	Gill, Thomas E.,	<i>Pecatonica.</i>
Boone,	Kammer, Frank J.,	<i>Scales Mound.</i>
Brown,	Bard, Jacob W.,	<i>Quincy.</i>
Brown,	Goodman, Earnest A.,	<i>Sadorus.</i>
Brown,	Malcolm, Howard S.,	<i>Roseville.</i>
Bureau,	Young, Dwayne G.,	<i>Lewistown.</i>
Bureau,	McManis, James W.,	<i>La Moille.</i>
Bureau,	Waddell, Charles A.,	<i>Princeton.</i>
Calhoun,	Green, Bessie R.,	<i>Ivesdale.</i>
Calhoun,	Stone, Paul P.,	<i>Lincoln.</i>
Carroll,	Renner, Edwin T.,	<i>Lanark.</i>
Carroll,	Madison, George,	<i>Savanna.</i>
Carroll,	Strauch, Bernard A.,	<i>Chadwick.</i>
Cass,	Gallaher, George P.	<i>Mt. Palatine.</i>
Cass,	Denny, Christina,	<i>Lincoln.</i>
Cass,	Robertson, Norman S.,	<i>Beardstown.</i>
Cass,	Blohm, Lee R.,	<i>Beardstown.</i>
Champaign,	Moss, Mary F.,	<i>Urbana.</i>
Champaign,	Woodin, Earl B.,	<i>St. Joseph.</i>

Champaign,	Egy, Willard L.,	<i>Urbana.</i>
Champaign,	Leidendeker, Frank E.,	<i>Urbana.</i>
Christian,	Adams, Leason H.,	<i>Taylorville.</i>
Christian,	Young, Roy N.,	<i>Springfield.</i>
Christian,	Large, George P.,	<i>Owaneco.</i>
Clark,	Fishback, William M.,	<i>Marshall.</i>
Clark,	Carrithers, Ira,	<i>Saunemin.</i>
Clay,	Moore, Samuel B.,	<i>Louisville.</i>
Clay,	Robinson, Willis S.,	<i>Champaign.</i>
Clinton,	Little, Robert F.,	<i>Tolono.</i>
Clinton,	Coggeshall, Lester B.,	<i>Oakwood.</i>
Coles,	Belting, Flora P. M.,	<i>Mattoon.</i>
Coles,	Byers, Frank M.,	<i>Charleston.</i>
1st Senatorial District,	Almy, William H.,	<i>Sterling.</i>
2d Senatorial District,	Van Doren, Carl,	<i>Urbana.</i>
2d Senatorial District,	Richelson, Walter A.,	<i>Chicago.</i>
3d Senatorial District,	Gunn, Alexander H.,	<i>Evanston.</i>
3d Senatorial District,	Zaerr, Byron L.,	<i>Chicago.</i>
3d Senatorial District,	Hawley, Ralph S.,	<i>La Grange.</i>
4th Senatorial District,	West, Porter R.,	<i>Watseka.</i>
4th Senatorial District,	Clifford, Winnifred H.,	<i>Champaign.</i>
5th Senatorial District,	Bagley, Helen A.,	<i>Oak Park.</i>
5th Senatorial District,	O'Brien, Charlotte,	<i>Chicago.</i>
5th Senatorial District,	Weber, Emil A.,	<i>Champaign.</i>
6th Senatorial District,	Christiansen, Johanna C. M.,	<i>Chicago.</i>
6th Senatorial District,	Hellman, Karl A.,	<i>Chicago.</i>
6th Senatorial District,	Hesse, Lawrence G.,	<i>Evanston.</i>
7th Senatorial District,	Kasten, Frederick W.,	<i>Dolton Station.</i>
7th Senatorial District,	Franklin, Howard B.,	<i>Harvey.</i>
7th Senatorial District,	Llewellyn, Clarinne,	<i>La Grange.</i>
7th Senatorial District,	Olsen, Sharon M.,	<i>Morgan Park.</i>
9th Senatorial District,	Krueger, Earnest T.,	<i>Chicago.</i>
9th Senatorial District,	Gunthorp, James M.,	<i>Chicago.</i>
9th Senatorial District,	Zika, B. Robert,	<i>Chicago.</i>
11th Senatorial District,	Maddock, Alice E.,	<i>Chicago.</i>
11th Senatorial District,	Underwood, Wilbert E.,	<i>Austin.</i>
13th Senatorial District,	Thayer, William S.,	<i>Chicago.</i>
13th Senatorial District,	Augustinus, Paul,	<i>Evanston.</i>
13th Senatorial District,	Schulte, Katherine A.,	<i>Chicago.</i>
15th Senatorial District,	Doherty, Mary G.,	<i>La Grange.</i>

17th Senatorial District,	Donaldson, Robert S.,	<i>Chicago.</i>
17th Senatorial District,	Grauten, Sylvester H.,	<i>Chicago.</i>
19th Senatorial District,	Dickey, Cromwell B.,	<i>La Grange.</i>
19th Senatorial District,	Coleman, George H.,	<i>Chicago.</i>
19th Senatorial District,	Grandpré, Ambrose G.,	<i>Chicago.</i>
19th Senatorial District,	Jessup, Richard D.,	<i>Chicago.</i>
21st Senatorial District,	Mueller, Walter H.,	<i>Chicago.</i>
21st Senatorial District,	Mack, Louis W.,	<i>Chicago.</i>
21st Senatorial District,	Tear, Herbert L.,	<i>Chicago.</i>
23d Senatorial District,	Klein, David,	<i>Chicago.</i>
23d Senatorial District,	Hanson, Frank L.,	<i>Austin.</i>
25th Senatorial District,	VanPetten, Robert M.,	<i>Champaign.</i>
27th Senatorial District,	Sanders, John J.,	<i>Chicago.</i>
29th Senatorial District,	Hill, Nathan R.,	<i>Champaign.</i>
31st Senatorial District,	Hachmeister, Henry W.,	<i>Chicago.</i>
31st Senatorial District,	Johnston, Ernest H.,	<i>Chicago.</i>
31st Senatorial District,	Lanferman, Walter E.,	<i>Chicago.</i>
Crawford,	Hildebrandt, Theophil H.,	<i>La Salle.</i>
Crawford,	Bevis, Dailey G.,	<i>Newton.</i>
Cumberland,	Good, Verna M.,	<i>Neoga.</i>
Cumberland,	Osborne, Richard E.,	<i>Moweaqua.</i>
De Kalb,	Peck, Harry S.,	<i>Champaign.</i>
De Kalb,	Pond, Ethel C.,	<i>Sycamore.</i>
De Witt,	Marvel, John E.,	<i>Waynesville.</i>
De Witt,	Davis, Nell S. M.,	<i>Farmer City.</i>
De Witt,	Matthews, Nellie P.,	<i>Clinton.</i>
Douglas,	Moore, Louis C.,	<i>Newman.</i>
Douglas,	Roll, Alva E.,	<i>Broadlands.</i>
Du Page,	Strauch, Oswald F.,	<i>Chadwick.</i>
Du Page,	Greene, William B.,	<i>Downer's Grove.</i>
Edgar,	Boone, Charles G.,	<i>Chrisman.</i>
Edgar,	Brewer, William E.,	<i>Newman.</i>
Edgar,	Tucker, Jesse O.,	<i>Champaign.</i>
Edwards,	Waddell, James B.,	<i>Taylorville.</i>
Edwards,	Woodham, Harry,	<i>Albion.</i>
Edwards,	Storer, Frances L.,	<i>Champaign.</i>
Effingham,	Poorman, Alfred P.,	<i>Altamont.</i>
Effingham,	Stair, Jacob L.,	<i>Altamont.</i>
Fayette,	Hoffman, Frank G.,	<i>Ramsey.</i>
Fayette,	Eggleston, Mary A.,	<i>Danville.</i>

Ford,	Black, Grace J.,	<i>Urbana.</i>
Ford,	Thomson, Fred N.,	<i>Paxton.</i>
Ford,	Bushnell, Ethel M.,	<i>Paxton.</i>
Franklin,	Parnalee, Louis R.,	<i>Mt. Vernon.</i>
Franklin,	Tucker, Burton F.,	<i>Anna.</i>
Fulton,	Swart, Harmon D.,	<i>Lewistown.</i>
Fulton,	Young, Thomas E.,	<i>Lewistown.</i>
Gallatin,	Smith, Valentine,	<i>Urbana.</i>
Gallatin,	Horrom, Robert E.,	<i>Atlanta.</i>
Greene,	Howell, Leslie D.,	<i>Ipava.</i>
Grundy,	Sachse, William,	<i>Morris.</i>
Grundy,	Powers, Laurence C.,	<i>Tiskilwa.</i>
Grundy,	Reeves, Alfred J.,	<i>Morris.</i>
Hamilton,	Fairweather, Charles A.,	<i>Hoodville.</i>
Hancock,	Baxter, Emile M.,	<i>Nauvoo.</i>
Hancock,	Cooke, Charles E.,	<i>Bowen.</i>
Hardin,	Elliston, Leroy B.,	<i>Princeton.</i>
Henderson,	Baxter, Charles B.,	<i>Nauvoo.</i>
Henry,	Randall, Frank A.,	<i>Cambridge.</i>
Henry,	Slaymaker, Charles M.,	<i>Genesco.</i>
Henry,	Cummings, Preston W.,	<i>Sheffield.</i>
Iroquois,	Rothgeb, Wade H.,	<i>Wellington.</i>
Iroquois,	Dillon, Lee A.,	<i>Sheldon.</i>
Jackson,	Scherer, Josephine,	<i>Murphysboro.</i>
Jackson,	Moss, Charles T.,	<i>Urbana.</i>
Jackson,	Hodson, Charles D.,	<i>Murphysboro.</i>
Jasper,	Johnson, Lotta L.,	<i>Newton.</i>
Jasper,	Garrison, Lloyd,	<i>Milford.</i>
Jasper,	Bryan, Harvey W.,	<i>Newton.</i>
Jefferson,	Mann, Mary E.,	<i>Gilman.</i>
Jersey,	Flowers, Roy W.,	<i>Quincy.</i>
Jersey,	Hake, Harry G.,	<i>Barry.</i>
Jersey,	Williford, Bessie,	<i>Nokomis.</i>
Jo Daviess,	Sype, George,	<i>Fairbury.</i>
Jo Daviess,	Bench, Alfred R.,	<i>Galena.</i>
Jo Daviess,	Nutting, Harry G. D.,	<i>Rock Island.</i>
Jo Daviess,	Schafmayer, Albert J.,	<i>Scales Mound.</i>
Johnson,	Hook, Henry H.,	<i>Vienna.</i>
Johnson,	Hook, Charles A.,	<i>Vienna.</i>
Johnson,	Murrell, Benjamin N.,	<i>Vienna.</i>

Kane,	Hinman, Glidden,	<i>Dundee.</i>
Kane,	Morgan, Ambert D.,	<i>Hampshire.</i>
Kane,	Dunning, William B.,	<i>Aurora.</i>
Kankakee,	Perreault, Maurice S.,	<i>St. Anne.</i>
Kankakee,	Van Inwagen, Frank,	<i>Momence.</i>
Kendall,	Freeburn, Walter H.,	<i>Plano.</i>
Kendall,	Garrett, Florence E.,	<i>Plano.</i>
Knox,	Parsons, Maud E.,	<i>Elgin.</i>
Knox,	Shrader, Frank K.,	<i>Knoxville.</i>
Lake,	Ray, Howard A.,	<i>Libertyville.</i>
Lake,	Noerenberg, Clarence E.,	<i>Highland Park.</i>
Lake,	Haines, Arthur C.,	<i>Gibson City.</i>
La Salle,	Eustis, Laura M.,	<i>Ottawa.</i>
La Salle,	McDougall, Agnes,	<i>Ottawa.</i>
La Salle,	Schaller, Alvin,	<i>Mendota.</i>
La Salle,	McCullough, Frederick R.,	<i>Streator.</i>
Lawrence,	Archer, Charles L.,	<i>Carmi.</i>
Lawrence,	Logan, Clarence C.,	<i>Flora.</i>
Lawrence,	Bushnell, Horace,	<i>Paxton.</i>
Lee,	Perry, Alphonso L.,	<i>Cornell.</i>
Lee,	Billings, Walter E.,	<i>Geneseo.</i>
Lee,	Baird, Grace J.,	<i>De Kalb.</i>
Livingston,	Strawn, James A.,	<i>Pontiac.</i>
Livingston,	Evvard, John M.,	<i>Pontiac.</i>
Logan,	Camp, Cara L.,	<i>Lincoln.</i>
Logan,	Howser, Theron R.,	<i>Lincoln.</i>
McDonough,	Burns, Deane,	<i>Macomb.</i>
McDonough,	Terrill, Fred,	<i>Colchester.</i>
McHenry,	Slawson, Harry H.,	<i>Harvard.</i>
McLean,	Moore, Francis G.,	<i>Bloomington.</i>
McLean,	Crum, Ethel,	<i>Lexington.</i>
Macon,	Hutchins, Claire E.,	<i>Decatur.</i>
Macon,	McLean, John C.,	<i>Maroa.</i>
Macoupin,	Dillavou, John M.,	<i>De Land.</i>
Madison,	Ward, Owen M.,	<i>Champaign.</i>
Madison,	Lowry, Thomas G.,	<i>Upper Alton.</i>
Marion,	Hewes, Clarence A.,	<i>Quincy.</i>
Marshall,	Dewey, Homer H.,	<i>Henry.</i>
Marshall,	Corrigan, Edward,	<i>New Berlin.</i>
Marshall,	Bonham, Winne M.,	<i>Macomb.</i>

Mason,	Warnock, Arthur R.,	<i>Mason City.</i>
Mason,	Shade, Imogene,	<i>Bloomington.</i>
Mason,	Stevenson, Milton L.,	<i>Mason City.</i>
Massac,	Slater, Willis A.,	<i>Fairbury.</i>
Massac,	Helm, Roy R.,	<i>Metropolis.</i>
Menard,	Sims, Charles E.,	<i>Lincoln.</i>
Menard,	Emery, Cecil,	<i>Greenville.</i>
Menard,	Hall, Ward E.,	<i>La Moille.</i>
Mercer,	Edwards, John I.,	<i>Aledo.</i>
Mercer,	Lee, Mylo,	<i>Aledo.</i>
Mercer,	Hasson, Harry B.,	<i>Moline.</i>
Monroe,	Dodd, Townsend F.,	<i>Anna.</i>
Montgomery,	Saathoff, George W.,	<i>Litchfield.</i>
Montgomery,	Barton, Walter E.,	<i>Nokomis.</i>
Montgomery,	Osborn, John M.,	<i>Butler.</i>
Morgan,	Buxton, Edwin W.,	<i>Jacksonville.</i>
Moultrie,	Davidson, Dora,	<i>Sullivan.</i>
Moultrie,	Gwinn, Alta,	<i>Oakland.</i>
Moultrie,	Davis, Seymour M.,	<i>Farmer City.</i>
Ogle,	Andrew, Charles E.,	<i>Paines Point.</i>
Ogle,	Thompson, Emmett C.,	<i>Byron.</i>
Peoria,	Burkhalter, Ralph M.,	<i>Peoria.</i>
Peoria,	Hall, Janet A.,	<i>Danville.</i>
Peoria,	Robertson, Roy C.,	<i>Peoria.</i>
Perry,	Gambach, Jacob,	<i>Hecker.</i>
Perry,	Erwin, John F.,	<i>Cutler.</i>
Perry,	Forester, Walter J.,	<i>Du Quoin.</i>
Piatt,	Davison, Margaret W.,	<i>Monticello.</i>
Piatt,	Gross, Alfred O.,	<i>Atwood.</i>
Piatt,	Walker, Roberta A.,	<i>Monticello.</i>
Pike,	Main, Roscoe C.,	<i>Pittsfield.</i>
Pulaski,	Hornor, Nellie N.,	<i>Danville.</i>
Putnam,	Hopkins, Ruby C.,	<i>Granville.</i>
Putnam,	Hatten, Frank W.,	<i>Delavan.</i>
Randolph,	McIntire, Mamie M.,	<i>Sparta.</i>
Randolph,	Fricke, Herman H.,	<i>Blair.</i>
Randolph,	Schroeder, Hugo C. H.,	<i>Chester.</i>
Rock Island,	Dart, Whitman,	<i>Rock Island.</i>
Rock Island,	Corrin, William G.,	<i>Hillsdale.</i>
Rock Island,	Eckhardt, William G.,	<i>Buffalo Prairie.</i>

Rock Island,	Strombeck, George M.,	<i>Moline.</i>
Rock Island,	Sheriff, Ralph E.,	<i>Reynolds.</i>
St. Clair,	Richeson, Virginia C.,	<i>East St. Louis.</i>
St. Clair,	Spencer, Fannie G. C.,	<i>Belleville.</i>
Saline,	Webber, William B.,	<i>Urbana.</i>
Saline,	Brooks, John H.,	<i>Casey.</i>
Sangamon,	Betts, David R.,	<i>Springfield.</i>
Sangamon,	Robinson, Ward A.,	<i>Springfield.</i>
Sangamon,	Hayes, Augustus W.,	<i>Pleasant Plains.</i>
Schuyler,	Huff, Nolan H.,	<i>Center.</i>
Schuyler,	Thompson, J. Arthur,	<i>Layton.</i>
Schuyler,	Weinberg, Nina M.,	<i>Rushville.</i>
Scott,	Kunkle, Roy D.,	<i>Peoria.</i>
Scott,	Smith, Leslie A.,	<i>Champaign.</i>
Shelby,	Eberspacher, Jacob C.,	<i>Pana.</i>
Shelby,	Cheney, George H.,	<i>Morrisonville.</i>
Shelby,	Gregory, Lenna M.,	<i>Moweaqua.</i>
Stark,	Robinson, Candace I.,	<i>Granville.</i>
Stark,	Dyckes, Lawrence J.,	<i>Lewistown.</i>
Stephenson,	Clendenen, Lois G.,	<i>Cairo.</i>
Stephenson,	Kerch, Walter W.,	<i>Freeport.</i>
Tazewell,	Hall, Frederick C.,	<i>Buffalo.</i>
Tazewell,	Corwine, George D.,	<i>Delavan.</i>
Union,	Roy, Howard M.,	<i>Anna.</i>
Union,	Roy, Rose E.,	<i>Anna.</i>
Union,	Maze, Everet A.,	<i>Anna.</i>
Vermilion,	Smith, Edwin R.,	<i>Hope.</i>
Vermilion,	Clingan, Dennis A.,	<i>Georgetown.</i>
Vermilion,	Porterfield, Nellie M.,	<i>Fairmount.</i>
Wabash,	Boon, Hugh T.,	<i>Urbana.</i>
Warren,	Beyer, George F.,	<i>Cullom.</i>
Warren,	Wickersham, Clarence E.,	<i>Roseville.</i>
Washington,	Kratz, Alonzo P.,	<i>Champaign.</i>
Washington,	Loutzenhiser, Ernest H.,	<i>Danville.</i>
Wayne,	Hughes, Charles H.,	<i>Fairmount.</i>
White,	Butzow, Louis J.,	<i>St. Joseph.</i>
White,	Reeves, Harry P.,	<i>Carmi.</i>
Whiteside,	Buyers, Archie S.,	<i>Sterling.</i>
Will,	Eyer, Ruth E.,	<i>Plainfield.</i>
Williamson,	Gore, Adolph,	<i>Marion.</i>

Williamson,	Pillsbury, Charles S.,	<i>Urbana.</i>
Williamson,	Phillips, Claude W.,	<i>Marion.</i>
Winnebago,	Derwent, Everett F.,	<i>Pecatonica.</i>
Winnebago,	Kimball, Robert H.,	<i>Rockford.</i>
Winnebago,	Ray, Arthur E.,	<i>Rockford.</i>
Winnebago,	Munger, Guy E.,	<i>Rock Island.</i>
Woodford,	Applegate, Frank G.,	<i>Atlanta.</i>

AGRICULTURAL SCHOLARSHIPS

Adams,	Nelson, Jacob C.,	<i>Canton.</i>
Adams,	Turner, Rufus P.,	<i>Quincy.</i>
Alexander,	Stanner, Guy W.,	<i>Mayview.</i>
Alexander,	Dunivant, John B.,	<i>Cairo.</i>
Bond,	Lohman, Curtis S.,	<i>Reno.</i>
Boone,	Gaines, Walter L.,	<i>Crete.</i>
Boone,	Gregg, Harry L.,	<i>Galesburg.</i>
Brown,	Kerley, Claude,	<i>Timexwell.</i>
Bureau,	Norton, William R.,	<i>Neponset.</i>
Calhoun,	Wheeler, Walter J.,	<i>Sinclair.</i>
Carroll,	Mackay, Jesse J.,	<i>Mt. Carroll.</i>
Carroll,	Meppen, William H.,	<i>Dixon.</i>
Cass,	Sinclair, Lawrence E.,	<i>Ashland.</i>
Cass,	Sudbrink, Warren C.,	<i>Beardstown.</i>
Champaign,	Penman, Thomas A.,	<i>Philo.</i>
Champaign,	Johnson, John T.,	<i>Urbana.</i>
Christian,	Garwood, Herman E.,	<i>Stonington.</i>
Christian,	Allen, Edward R.,	<i>Pana.</i>
Christian,	Simpson, John A. L.,	<i>Pana.</i>
Christian,	Simpson, Frank,	<i>Pana.</i>
Clark,	David, Samuel G.,	<i>Onarga.</i>
Clay,	Popham, Edwin S.,	<i>Charleston.</i>
Clay,	McMillen, Robert E.,	<i>Homer.</i>
Clinton,	Block, Walter R.,	<i>Champaign.</i>
Clinton,	Pletscher, Adolph B.,	<i>Trenton.</i>
Coles,	Shinn, William R.,	<i>Mattoon.</i>
Coles,	Farrar, Roscoe,	<i>Mattoon.</i>
1st Cong. District,	Brazier, Irwin M.,	<i>Chicago.</i>
2d Cong. District,	Wheeler, Hiram H.,	<i>Chicago.</i>
2d Cong. District,	Walls, James E.,	<i>Chicago.</i>

3d Cong. District,	Stults, Elmer E.,	<i>Evanston.</i>
3d Cong. District,	Norris, Ralph V.,	<i>Chicago.</i>
4th Cong. District,	Ware, Josiah W.,	<i>Riverside.</i>
5th Cong. District,	Corbin, Edward L.,	<i>Carlinville.</i>
6th Cong. District,	Doyle, Robert E.,	<i>Chicago.</i>
7th Cong. District,	Townsend, Carl R.,	<i>Oak Park.</i>
8th Cong. District,	Burgess, Frank M.,	<i>Tonica.</i>
9th Cong. District,	Hughes, Kenneth R.,	<i>Antioch.</i>
9th Cong. District,	Jensen, Elof B.,	<i>Chicago.</i>
10th Cong. District,	Baker, Alwyn J.,	<i>Chicago.</i>
Crawford,	Wall, William R.,	<i>Oblong.</i>
Cumberland,	Coen, John E.,	<i>Neoga.</i>
De Kalb,	White, Fred H.,	<i>Longview.</i>
De Kalb,	Wood, Henry C.,	<i>De Kalb.</i>
De Witt,	Doyle, John C.,	<i>Farmer City.</i>
Douglas,	Goodspeed, Wilber F.,	<i>Tuscola.</i>
Douglas,	McCown, Arthur L.,	<i>Newman.</i>
Du Page,	Jorgenson, Fred A.,	<i>Lombard.</i>
Du Page,	Curtis, Charles E.,	<i>Clarendon.</i>
Edgar,	Brinkerhoff, Sievert W.,	<i>Redmon.</i>
Edgar,	Trotter, Carroll A.,	<i>Kansas.</i>
Edwards,	Mozley, John L.,	<i>Vienna.</i>
Effingham,	Brooks, Ira S.,	<i>Altamont.</i>
Effingham,	Oathout, Charles H.,	<i>Urbana.</i>
Fayette,	Morris, Keith G.,	<i>Rantoul.</i>
Fayette,	Spencer, Eugene,	<i>Vandalia.</i>
Ford,	Freeman, Frank S.,	<i>Heyworth.</i>
Ford,	Downs, Walter J.,	<i>Bloomington.</i>
Franklin,	Folkers, Harry C.,	<i>Warrensburg.</i>
Franklin,	Hutson, Seba F.,	<i>Benton.</i>
Fulton,	Kidder, Albert F.,	<i>Farmington.</i>
Fulton,	Craig, John H.,	<i>Lewistown.</i>
Fulton,	Baldwin, Lewis F.,	<i>Ipava.</i>
Gallatin,	Buck, Colburn F.,	<i>Springfield.</i>
Greene,	Melvin, Leon R.,	<i>Greenfield.</i>
Greene,	Hull, Ward L.,	<i>Roodhouse.</i>
Greene,	Hardcastle, Paul S.,	<i>Carrollton.</i>
Grundy,	Schrotberger, Curtis J.,	<i>Gardner.</i>
Hamilton,	Chambers, Ralph E.,	<i>Sadorus.</i>
Hamilton,	Ward, Lester E.,	<i>Decatur.</i>

Hamilton,	Roessler, Luther M.,	<i>Shelbyville.</i>
Hancock,	Griffiths, Walter M.,	<i>Pontoosuc.</i>
Hardin,	Bregger, Thomas,	<i>South Heights.</i>
Henderson,	Stewart, Harold W.,	<i>Hebron.</i>
Henry,	Allison, Ira D.,	<i>Alpha.</i>
Henry,	Allison, Fred G.,	<i>Alpha.</i>
Iroquois,	Hegnauer, Leonard,	<i>Onarga.</i>
Iroquois,	Caswell, Clarence A.,	<i>Wellington.</i>
Jackson,	Deason, Francis E.,	<i>Murphysboro.</i>
Jackson,	Dillinger, Henry,	<i>Carbondale.</i>
Jackson,	Parks, Dwight C.,	<i>Murphysboro.</i>
Jasper,	Cleavinger John S.,	<i>Springfield.</i>
Jefferson,	Meharry, Charles L.,	<i>Tolono.</i>
Jefferson,	Kincaid, Arthur T.,	<i>Athens.</i>
Jersey,	Kincaid, Todd P.,	<i>Greenview.</i>
Jo Daviess,	Johnstone, Guy C.,	<i>Bloomington.</i>
Jo Daviess,	Puckett, Claud C.,	<i>Warren.</i>
Jo Daviess,	Ross, Ford,	<i>Elgin.</i>
Johnson,	Wright, Herman F.,	<i>Vienna.</i>
Johnson,	Hooker, Claude H.,	<i>Vienna.</i>
Kane,	Gilkerson, Thomas J.,	<i>Hampshire.</i>
Kane,	Bartlett, Walter E.,	<i>Elburn.</i>
Kankakee,	Risser, Ralph G.,	<i>Kankakee.</i>
Kendall,	Hepburn, Nelson W.,	<i>Genoa.</i>
Kendall,	Prichard, Frederick S.,	<i>Ottawa.</i>
Knox,	Holt, Sidney V.,	<i>Oncida.</i>
Knox,	Gregg, Clarence A.,	<i>Galesburg.</i>
La Salle,	Center, Orlo D.,	<i>Grand Ridge.</i>
La Salle,	Warick, Cornelius E.,	<i>Utica.</i>
Lawrence,	Bolin, Willie K.,	<i>Sullivan.</i>
Lawrence,	Sheetz, Roscoe M.,	<i>Freeport.</i>
Lee,	Wyman, Edmund S.,	<i>Sycamore.</i>
Lee,	Cortright, Clyde C.,	<i>Dixon.</i>
Livingston,	Stanford, Howard R.,	<i>Chatsworth.</i>
Logan,	Jones, Clarence O.,	<i>Lincoln.</i>
McDonough,	Glasgow, Robert D.,	<i>Tennessee.</i>
McDonough,	Martin, John L.,	<i>Wilmington.</i>
McHenry,	Stewart, Robert W.,	<i>Hebron.</i>
McHenry,	James, Delos L.,	<i>Crystal Lake.</i>
McLean,	Shade, Henry R.,	<i>Bloomington.</i>

McLean,	Downs, Orrie H.,	<i>Bloomington.</i>
Macon,	Grady, Charles H.,	<i>Maroa.</i>
Macoupin,	Long, Roy H.,	<i>Lexington.</i>
Macoupin,	Wright, Carl,	<i>Assumption.</i>
Macoupin,	Vaniman, Vernon,	<i>Virden.</i>
Madison,	Stocker, Cornelius,	<i>Highland.</i>
Marion,	Smalley, Edwin W.,	<i>Tolono.</i>
Marshall,	Powers, Howard C.,	<i>Princeton.</i>
Mason,	Meyer, George H.,	<i>Havana.</i>
Massac,	Timmons, John S.,	<i>Monticello.</i>
Massac,	Holderby, Robert A. P.,	<i>Metropolis.</i>
Menard,	Culver, Walter A.,	<i>Athens.</i>
Mercer,	Gustafson, Axel F.,	<i>Aledo.</i>
Mercer,	Grosh, Wilber W.,	<i>Mendon.</i>
Monroe,	Chester, Edward E.,	<i>Champaign.</i>
Monroe,	West, James H.,	<i>Sidney.</i>
Montgomery,	Paden, James C.,	<i>Hillsboro.</i>
Morgan,	Joy, Harold P.,	<i>Chapin.</i>
Morgan,	Masters, James H.,	<i>Jacksonville.</i>
Moultrie,	Cresap, Dwight R.,	<i>Cushman.</i>
Moultrie,	Phillips, Albert V.,	<i>Sullivan.</i>
Ogle,	Gentle, Harry J.,	<i>Farmington.</i>
Ogle,	Sanford, Elbert H.,	<i>Polo.</i>
Peoria,	Miner, James H.,	<i>Adair.</i>
Peoria,	Atwood, Paul W.,	<i>Lewistown.</i>
Perry,	Braden, Clarence A.,	<i>Cutler.</i>
Perry,	Needles, Elmer H.,	<i>Belleville.</i>
Piatt,	Wise, Lewis E.,	<i>Cerro Gordo.</i>
Piatt,	Burwash, Milo E.,	<i>Champaign.</i>
Pike,	Warlow, Arthur B.,	<i>Bloomington.</i>
Pope,	Clanahan, Robert H.,	<i>Springfield.</i>
Pulaski,	Grady, Fred M.,	<i>Maroa.</i>
Putnam,	Dysart, John P.,	<i>Granville.</i>
Putnam,	Silliman, Minott,	<i>Toulon.</i>
Putnam,	Leake, Warren J.,	<i>Dixon.</i>
Randolph,	Meharry, Edwin T.,	<i>Tolono.</i>
Randolph,	Mochrs, Lewis W.,	<i>Leanderville.</i>
Richland,	Callaway, Ralph G.,	<i>Tuscola.</i>
Rock Island,	Bracker, Emil M. D.,	<i>Hillsdale.</i>
Rock Island.	Powell, Arthur L.,	<i>Bowen.</i>

St. Clair,	Garwood, Frank S.,	<i>Stonington.</i>
St. Clair,	Hertel, Clarence A.,	<i>Freeburg.</i>
Saline,	Smith, Alfred G.,	<i>Hope.</i>
Saline,	Reat, Ralf W.,	<i>Charleston.</i>
Sangamon,	Stout, Samuel P.,	<i>Glenarm.</i>
Sangamon,	Ferry, Hoyt F.,	<i>Pleasant Plains.</i>
Schuyler,	McCreery, Chester R.,	<i>Rushville.</i>
Scott,	Anderson, Leslie L.,	<i>Summer Hill.</i>
Scott,	Slaymaker, George L.,	<i>Geneseo.</i>
Shelby,	Reeves, Howell H.,	<i>Champaign.</i>
Shelby,	Fry, Roy E.,	<i>Tower Hill.</i>
Stark,	Henline Alma,	<i>Towanda.</i>
Stephenson,	Madden, Irwin A.,	<i>Freeport.</i>
Tazewell,	Allen, Paschal,	<i>Delavan.</i>
Tazewell,	Allen, Fred E.,	<i>Delavan.</i>
Tazewell,	Truman, Laurel,	<i>Urbana.</i>
Union,	Seay, Rufus F.,	<i>Anna.</i>
Vermilion,	Hubbard, Wilbert E.,	<i>Georgetown.</i>
Wabash,	Glassco, Roy T.,	<i>Charleston.</i>
Wabash,	Lohman, Howard A.,	<i>Urbana.</i>
Warren,	Glasgow, Hugh,	<i>Tennessee.</i>
Warren,	Buck, Earl R.,	<i>Franklin Grove.</i>
Washington,	Truman, Brook H.,	<i>Urbana.</i>
Wayne,	Williams, Andrew P.,	<i>Rockford.</i>
Wayne,	Glassco, Ray J.,	<i>Charleston.</i>
White,	Brearley, Walter E.,	<i>Rockford.</i>
White,	Short, Ralph M.,	<i>Hillsboro.</i>
Whiteside,	Spalding, Coit W.,	<i>Elburn.</i>
Will,	Craig, Stephen J. Jr.,	<i>Wilmington.</i>
Will,	McClenahan, John R.,	<i>Manhattan.</i>
Williamson,	Ferrell, Caesar,	<i>Carterville.</i>
Williamson,	Harris, William M.,	<i>Johnson City.</i>
Winnebago,	Tullock, George A.,	<i>Rockford.</i>
Woodford,	Wade, Oliver A.,	<i>Chenoa.</i>

SCHOLARSHIPS IN HOUSEHOLD SCIENCE

Adams,	Grosh, Elizabeth P.,	<i>Mendon.</i>
Boone,	Sexauer, Hilda C.,	<i>Belvidere.</i>
Brown,	Clark Mamie E.,	<i>Mt. Sterling</i>

Bureau,	Powers, Alice,	<i>Tiskilwa.</i>
Carroll,	Mackay, Zella G.,	<i>Mt. Carroll.</i>
Cass,	Thompson, Ethel A.,	<i>Bloomington.</i>
Champaign,	Barr, Susan J.,	<i>Urbana.</i>
Champaign,	Gilkerson, Portia E.,	<i>Urbana.</i>
Champaign,	Howe, Mary,	<i>Urbana.</i>
Christian,	Logan, Winnie A.,	<i>Edinburg.</i>
Christian,	Logan, Grace B.,	<i>Edinburg.</i>
Clark,	McMillen, Mary B.,	<i>Homcr.</i>
Clay,	Hess, Abigail M.,	<i>Flora.</i>
Coles,	Reat, Ruth,	<i>Charleston.</i>
Coles,	Harrison, Florence,	<i>Danville.</i>
De Kalb,	Parke, Mila,	<i>Sycamore.</i>
De Witt,	Miller, Nellie A.,	<i>Urbana.</i>
De Witt,	Odernheimer, Virginia C.,	<i>Champaign.</i>
Douglas,	Thornton, Sara,	<i>Sadorus.</i>
Douglas,	Bryan, Sarah E.,	<i>Champaign.</i>
Edgar,	Baldwin, Helen R.,	<i>Paris.</i>
Effingham,	Davis, Hattie R.,	<i>Bondville.</i>
Ford,	Manspeaker, Edith,	<i>Champaign.</i>
Ford,	Dillon, Bessie,	<i>Normal.</i>
Franklin,	Hutson, Stella E.,	<i>Benton.</i>
Fulton,	Waughtel, Mrs. Nellie,	<i>Cuba.</i>
Grundy,	McCormick, Mary E.,	<i>Vcrona.</i>
Iroquois,	Matthews, Martha M.,	<i>Onarga.</i>
Kane,	Gifford, Edna M.,	<i>Elgin.</i>
Kankakee,	Dunlap, Isabella J.,	<i>Savoy.</i>
La Salle,	Barlow, Mrs. Jennie C.,	<i>Bloomington.</i>
Livingston,	Opperman, Anna L.,	<i>Cullom.</i>
Logan,	Tilton, Nellie E.,	<i>Urbana.</i>
Logan,	Miller, Mildred F.,	<i>Lincoln.</i>
McLean,	Boyer, Olive E.,	<i>Bloomington.</i>
Macon,	Smith, Fleda M.,	<i>Urbana.</i>
Mason,	McCain, Myrtle B.,	<i>Bloomington.</i>
Montgomery,	Greene, Ruth E.,	<i>Raymond.</i>
Moultrie,	Kerr, Josephine,	<i>Urbana.</i>
Moultrie,	Davis, Mary H.,	<i>Urbana.</i>
Peoria,	Welles, Nelle F.,	<i>Elmwood.</i>
Piatt,	Miller, Daisy M.,	<i>Urbana.</i>
Piatt,	Busey, Carolyn E.,	<i>Urbana.</i>

Piatt,	Smith, Verna M.,	<i>Champaign.</i>
Putnam,	Harper, Bertha M.,	<i>Granville.</i>
Shelby,	Casstevens, Edna M.,	<i>Fancher.</i>
Stephenson,	Shannon, Agnes N.,	<i>Freeport.</i>
Tazewell,	Coen, Margaret D.,	<i>Normal.</i>
Vermilion,	Hall, Claudia B.,	<i>Hoopeston.</i>
Vermilion,	Fox, Mabel E.,	<i>Danville.</i>
Will,	Henion Myra F.,	<i>Fairbury.</i>
Williamson,	Warder, Evelyn,	<i>Marion.</i>
Winnebago,	Wollaver, Jennie E.,	<i>Rockford.</i>
Woodford,	Dickinson, Nell M.,	<i>Eureka.</i>

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Edward Corrigan.	Esther Massey.
Elizabeth Forrest.	James Albert Porter.
Litta Dustin Jackson.	Edith Rogers.

FINAL HONORS

Elmer Logan Garnett.	Rudolph Ernst Schreiber.
Elizabeth Grosvenor Greene	Aimee May Sides.
Noah Knapp.	Mildred Eliza Sonntag.
Pearle Manspeaker.	Ella Eugenia Worthen.

SPECIAL HONORS

John Edward Anderson,	Frederick David Niedermeyer.
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*See p. 318.

COLLEGE OF ENGINEERING

PRELIMINARY HONORS

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Ralph Corson Llewellyn.
Lawrence Justin McCarty.
Harrison Franklin Robinson.

Electrical Engineering—

Thomas Hamer Amrine.
Paul Augustinus.
Leonard Vaughan James.
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Civil Engineering—

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Ambrose Goulet Grandpré.
Charles Elliott Henderson.
Floyd Sinnock Hewes.
Frank Gordon Hoffman.
Edward John Mehren, A.B.
Royal Elmer Post.

Mechanical Engineering—

Alfred Ritscher Bench.
Charles Ludwig Holl
Roy Delos Kunkle.
Joseph Nicolay Nielsen.
Willard Lacy Pollard.

FINAL HONORS

Architecture—

Ralph Elliott Abell

Electrical Engineering—

Frank Wyman Hilliard.
John Orlo Taylor.

Civil Engineering—

Torris Eide.
Augustus Joseph Reef.
Carroll Carson Wiley.

Mechanical Engineering—

Henry Bernhard Dirks.
Samuel Barry Flagg.

Municipal and Sanitary Engineering

Roy Victor Engstrom.
Smith Tompkins Henry, Jr.

SPECIAL HONORS

Electrical Engineering—

John Orlo Taylor.

Municipal and Sanitary Eng'g—

Roy Victor Engstrom.

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James Ricketts Shinn.

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FINAL HONORS

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Edna Hopkins.

Leila Pauline King.

Isabella Jane McCulloch.

Bertha Ella Royce.

Belle Sweet.

Alice Louise Wing .

Ida Faye Wright.

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IN 1904

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Reported to the Adjutant General, United States Army, as distinguished Cadets, for the purpose of having their names published in the Register of the United States Army: Neil McMillan, Frank Hamilton Kneeland, Carrol Carson Wiley.

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Field and Staff—

Colonel	F. G. Pegelow.
Lieutenant Colonel	E. W. Wagenseil.
Major 1st. Battalion	F. W. Cutler.
Major 2nd. Battalion	E. R. Smith.
Major 3rd. Battalion	W. W. Clay.
Captain and Adjutant	W. H. Rothgeb.
Battalion Adjutant (1st. B.) (1st. Lieut.)..	D. B. A. Graham.
Battalion Adjutant (2nd. B.) (1st. Lieut.)..	O. S. Watkins.
Battalion Adjutant (3rd. B.) (1st. Lieut.)..	C. A. Hewes.
Sergeant Major	B. L. Zaerr.
Chief Trumpeter.....	L. H. Maxfield.
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Sergeant Major (2nd. B.).....	J. A. Strawn.
Sergeant Major (3rd. B.).....	R. C. Main.
Color Sergeant.....	J. M. Warner.
Color Sergeant.....	J. J. Prendergast.

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lard; Second Lieutenant, W. H. Roney; First Sergeant, H. C.
Zink; Sergeants, H. G. Treichel, F. S. Bodwell, F. H. Mc-
Conaughy, W. H. Elliott, W. L. Egy; Corporals, H. Savidge,
G. S. Hubbard, W. C. Stitt, A. F. Seaman, E. B. Gephard, S.
B. Smith.

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Evans; Second Lieutenant, C. E. Little; First Sergeant, R. S.
Donaldson; Sergeants, J. R. Hamilton, A. N. Bennett, N. N.
Osburn, C. H. Reardon; Corporals, F. A. Pruitt, W. E. Barton,
B. M. VanVoorhis, C. L. Meharry, A. E. Huckins, A. C. Miller.

Company C—Captain, D. H. Brush; First Lieutenant, R. H. Regan;
Second Lieutenant, D. D. Williams; First Sergeant, C. T. Moss,
Sergeants, F. C. Bagby, L. C. Powers, R. V. Ross, E. H. Rey-
nolds; Corporals, F. C. Hall, O. M. Ward, B. P. Rosencrans,
H. Woodham, E. A. Tilden, A. S. Singbush.

- Company D—Captain, —————; First Lieutenant, W. J. Kanne; Second Lieutenant, E. M. Baxter; First Sergeant, C. C. Williams; Sergeants, E. F. Kultchar, C. M. Slaymaker, F. J. Kammer, F. N. Thomson; Corporals, C. E. Noerenberg, R. D. Jesup, A. C. Pearman, H. G. Weakley, F. S. Davis.
- Company E—Captain, W. G. Eckhardt, First Lieutenant, W. E. Warne; Second Lieutenant, H. Schmidt; First Sergeant, H. D. Hughes; Sergeants, W. C. Wolf, A. D. Morgan, F. H. White, C. Emery; Corporals, N. S. Robertson, M. E. Hagan, F. J. Donnersberger, B. T. Anderson, M. A. Kendall, J. A. Long.
- Company F—Captain, J. E. Dunn; First Lieutenant, C. E. Henderson; Second Lieutenant, J. R. Clark; First Sergeant, L. R. Wilson; Sergeants, W. K. Bolin, W. Lewis, H. K. Patch, H. H. Reeves; Corporals, V. Smith, P. R. West, J. J. Burke, J. F. Cox, W. C. Caldwell, F. S. Luney.
- Company G—Captain, H. H. Moss; First Lieutenant, A. M. Dunlap; Second Lieutenant, H. H. Weaver; First Sergeant, C. S. Pillsbury; Sergeants, M. Greenleaf, L. G. Schumaker, G. H. Peters, S. V. Holt; Corporals, G. W. Russell, C. L. Neu, W. E. Chance, A. P. Kratz, J. W. Gilchrist, P. R. Emery.
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- Battery—Captain, D. E. Mather; First Lieutenant, F. S. Slocum; Second Lieutenant, L. E. Wise; First Sergeant, L. V. Johnson; Sergeants, L. H. Wood, R. N. Fargo, W. M. Stewart, J. O. Kammerman.
- Band—Sergeants, A. A. Harding, C. E. Hoff.

INFANTRY

University Bronze Medals.

COMPANY COMPETITIVE

Company "E," University Regiment.

Captain H. B. Murphy.

First Lieutenant W. G. Eckhardt. Second Lieutenant A. B. Roy.

First Sergeant E. R. Murphy.

SERGEANTS

R. H. Bennett, H. Smith, H. C. Storm, G. W. Saathoff.

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Roberts, L. P.	Cermak, J.	Ford, G. S.
Rump, C.	Chester, E. E.	Gardner, H. C.
Stanley, A. P.	Donnersberger, F. J.	Green, H. L.
Strong, R. S.	Eberspacker, J. C.	Grierson, W. G.
Townsend, R. E.	Edmunds, D. A.	Hachmeister, G. J. E.
Alsip, A. A.	Emery, C.	Hagan, M. E.
Brooks, J. H.	Finefield, G. L.	Harnit, J. M.
Joy, H. P.	Mellen, A. F.	Harrison, J. F.
Kacin, A. C.	Miller, R. A.	Hilton, F. E.
Long, J. A.	Moore, S. B.	Jensen, T.
Machamer, W. E.	Morgan, A. D.	Reynolds, F. M.
Marks, D. T.	Oliphant, C. E.	Robertson, N. S.
Martin, E. W.	Peck, H. S.	Southwick, J. D.
Webster, A. L.	White, C. C.	VanVoorhis, B. N.
Wheeler, H. H.	Wolf, W. C.	Derwent, E. F.
White, F. H.		

ROSTER

WINNING ORGANIZATIONS—ANNUAL COMPETITIVE
DRILL

INDIVIDUAL

Hazelton Gold Medal.

Lance Corporal Lee Steward Taylor.

ARTILLERY

University Bronze Medals.

GUN DETACHMENT

First Lieutenant J. D. Blocher.

Gunner L. E. Wise.

Cadet Private J. H. Hinman.

Cadet Private N. H. Jacobsen.

Cadet Private R. S. Marshall.

Cadet Private E. E. Meier.

Cadet Private L. R. Melvin.

Cadet Private C. C. Rich.

Cadet Private W. A. Slater.

Cadet Private H. V. Swart.

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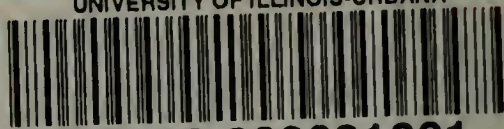
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